

**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawaii**

February 11, 2011

**Board of Land and
Natural Resources
State of Hawaii
Honolulu, Hawaii**

REGARDING: Request that the Board Grant a Petition for a Contested Case Hearing with Respect to an Amendment to Conservation District Use Permit (CDUP) OA-2670 to Construct a Marina Entrance Channel Located at Honouliuli, Ewa, Oahu, Plat (1) 9-1-012 and for Authorization to Select and Appoint a Hearing Officer

BACKGROUND:

Haseko (EWA), Inc. has been working for years on its proposed development of the Hoakalei Marina and the surrounding area. In 1993, Haseko requested a CDUP to construct a marina entrance for a proposed 120-acre marina. In April 2000¹, the Board of Land and Natural Resources (Board) conditionally granted CDUP OA-2670 allowing Haseko to construct a marina entrance channel at Honouliuli, Ewa, Oahu.

On July 13, 2001, the Board approved Haseko's request to amend the CDUP by reducing the size of the marina.

On August 24, 2007, Haseko again came before the Board requesting another amendment to the CDUP to further reduce the size of the marina. The Board deferred this request and later granted it on February 28, 2008. Michael Kumukauoha Lee requested a contested case. On December 18, 2008, the Board directed Mr. Lee to amend his written request. He did so. Haseko then withdrew its request to reduce the size of the marina.

In 2010, Haseko again asked the Board to approve a reduction in marina size, the same reduction the Board previously approved and Haseko withdrew. The Board approved this request at its September 9, 2010 meeting. Mr. Lee and Glenn J. Oamilda made oral and written requests for a contested case as to the Board's action.

RECEIVED PETITIONS (Exhibits 1 & 2)

The Department received two petitions requesting a contested case from Glenn J. Oamilda and Michael Kumukauoha Lee. Regarding Mr. Oamilda's petition, his document purports to challenge Haseko's request "to amend from urban to conservation approximately a 4-acre parcel of shoreline where Kaloi Gulch drainway terminates at One'ula/HauBush Beach Park." Mr.

¹ The Board originally granted the CDUP in 1994. Its decision was appealed to and affirmed by the circuit court, then appealed to the Supreme Court. The Supreme Court remanded for consideration in light of Pub. Access Shoreline Haw. v. Hawaii County Planting Comm'n, 79 Haw. 425, 903 P.2d 1246 (1995). The Board again approved the CDUP in April 2000.

Oamilda repeats this error when discussing his disagreement with the request, when in fact; no such request was before the Board.

Elsewhere in his document, Mr. Oamilda correctly identifies the action as downsizing the proposed marina. However, Mr. Oamilda fails to identify any interest that may be affected by the action (either his own interest or that of Ewa Beach Community Association). The relief requested by Mr. Oamilda does not relate to the Board's action on September 9, 2010.

Mr. Lee's petition is unclear as to his exact rights and the reason those rights will be affected by the action at hand. His claim to be a native Hawaiian whose constitutionally protected rights are somehow at stake might not be sufficient in the absence of other information. However, the Board previously found that Mr. Lee had standing to challenge Haseko's Kaloi Gulch drainageway project that is part of Haseko's overall development plan. Therefore, he may be entitled to a contested case when Haseko previously sought to reduce the sized of the marina.

ANALYSIS

Pursuant to §91-1(5), of the Hawaii Revised Statutes, a contested case hearing is one where the "legal rights, duties, or privileges of specific parties are required by law to be determined after an opportunity for agency hearing." An "agency hearing" is defined as "such hearing held by an agency immediately prior to a judicial review of a contested case as provided in section 91-14."² A contested case is "required by law" if the statute or rule governing the activity in question mandates a hearing prior to the administrative agency's decision-making, or if mandated by due process.³

The question of whether a contested case must be afforded in any particular matter may be divided into 2 parts:

- 1) Could anyone be entitled to a contested case, i.e. are rights of any "specific person" "required by law" to be determined after an "agency hearing"?
- 2) Does the particular person requesting a contested case have standing, i.e., is the requestor one of the specific persons at issue in the first part of the inquiry?

A contested case hearing is "required by law" if the statute or rule governing the activity in question mandates a hearing prior to the administrative agency's decision-making, or if a hearing is mandated by due process. As to due process, the Hawaii's supreme courts have developed a two-step analysis to determine if a claimant is entitled to a due process hearing. First, the court looks at whether the particular interest is "property" within the meaning of the due process

² The Board's sunshine meeting is not an "agency hearing" as that term is used in these definitions. Simpson v. Department of Land and Natural Resources, State of Hawaii, 8 Haw. App. 16, 25, 791 P.2d 1267, 1273 (1990), overruled on other grounds, Kaniakapupu v. Land Use Com'n, 111 Hawaii 124, 139 P.3d 712 (2006) and Pele Defense Fund v. Puna Geothermal Venture, 77 Hawaii 64, 69, 881 P.2d 1210, 1215, (1994) (holding that a Board sunshine meeting is "a public hearing required by law" but not "a contested case hearing").

³ The Fourteenth Amendment to the United States Constitution provides, in part, "nor shall any state deprive any person of life, liberty, or property, without due process of law." Article I, Sec. 4 of the Hawaii Constitution provides, in part, "[n]o person shall be deprived of life, liberty or property without due process of law."

clauses of the federal and state constitutions. Second, the court determines what specific procedures are required to protect the interest asserted.⁴

“To have a property interest in a benefit, a person clearly must have more than an abstract need or desire for it. He must have more than a unilateral expectation of it. He must, instead, have a legitimate claim of entitlement to it.”⁵

A possible source of protectable rights is Article XII, section 7 of the Hawaii State Constitution that states: The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupuaa tenant who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.

If a particular person has standing, this most likely would overlap with whether a contested case is required. The questions of whether a particular person has standing involves a three-part test:

- 1) Whether the person "has suffered an actual or threatened injury";
- 2) Whether "the injury is fairly traceable to the action;" and
- 3) Whether "A favorable decision would likely provide relief for [the person's] injury."

DISCUSSION

Mr. Oamilda fails to identify any interest in the property subject of the Board's action that constitutes a property right entitled to due process protection. He fails to identify any basis to find that he has standing to challenge the action. It is therefore; "clear as a matter of law" that Mr. Oamilda is not entitled to challenge the Board's action by way of contested case.⁶

Regarding Mr. Lee's petition, the petition is unclear as to his exact rights and the reason(s) those rights will be affected by the action at hand. His unsupported and unelaborated claim to be a native Hawaiian whose constitutionally protected rights are somehow at stake might not be sufficient in the absence of other information. But here the Board previously found that Mr. Lee had standing as to the drainage project and that he might be entitled to a contested case when Haseko previously sought to reduce the size of the marina. Given these facts, there is at least a reasonable possibility that a contested case is required by due process.

We also note that HAR § 13-5-40 (a)(1) requires that “public hearings shall be held . . . on all applications for a proposed use of land for commercial purposes.” And, Haw. Rev. Stat. § 183C-8 (Cum. Supp. 2009) provides:

Any final order of the department based upon this [chapter] may be
appealed to the circuit court of the circuit in which the land in

⁴ Alejado v. City & County of Honolulu, 89 Haw. 221, 226-27, 971 P.2d 310, 315-16 (Haw. App. 1999).

⁵ Id., 89 Haw. at 227, 971 P.2d at 316 (citing Bd. of Regents v. Roth, 408 U.S. 564 (1972)).

⁶ Pursuant to HAR, §13-1-29.1, the Board without a hearing may deny a request for a contested case “when it is clear as a matter of law that the request concerns a subject that is not within the adjudicatory jurisdiction of the board or when it is clear as a matter of law that the petitioner does not have a legal right, duty, or privilege entitling one to a contested case proceeding.”

question is found. The appeal shall be in accord with chapter 91 and the Hawaii rules of civil procedure.

As to Mr. Lee's standing, he claims a right to a contested case as a matter of due process. In such a case, the standing issue substantially overlaps with the question of whether a contested case is required by law. That is so because a person who has a right to a contested case because his or her constitutionally protected rights are affected by the agency action will also necessarily have standing.⁷

Here it is not "clear as a matter of law" whether Mr. Lee is entitled to a contested case. At a minimum therefore Mr. Lee is entitled to a hearing that would determine whether Mr. Lee has constitutionally protected rights and how those rights would be affected (if at all) by the proposed Board action; whether a contested case is otherwise required by rule or statute; and whether Mr. Lee meets the requirements to be entitled to a contested case.

However, those issues would substantially overlap with the issues in a contested case. Rather than a possible two-step process, staff therefore believes it is appropriate to proceed with a contested case hearing at which Mr. Lee's rights would be fully explored.

RECOMMENDATION:

Staff therefore recommends that the Board of Land and Natural Resources:

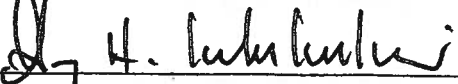
- 1) Deny Mr. Oamilda's petition for a contested case;
- 2) Grant Mr. Lee's petition for a contested case;
- 3) Limit the contested case to issues raised by the change in size of the marina;
- 4) Authorize the appointment of a Hearing Officer to conduct the hearing and report back to the Board for a final decision; and
- 5) Delegate authority for selection of the Hearing Officer to the Chairperson.

Respectfully submitted,



K. Tiger Mills, Staff Planner
Office of Conservation and Coastal Lands

Approved for submittal:



William J. Aila, Jr., Interim Chairperson
Board of Land and Natural Resources

⁷ The question as to whether either or both of these provisions require a contested case in this situation need not be resolved because of the due process analysis.



STATE OF HAWAII
BOARD OF LAND AND NATURAL RESOURCES

PETITION FOR A CONTESTED CASE HEARING

RECEIVED

10 SEP 20 10:54

OFFICIAL USE ONLY	
Case No.	Date Received
Board Action Date / Item No.	Division/Office

DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

INSTRUCTIONS:

- File (deliver, mail or fax) this form within ten (10) days of the Board action date to:
Department of Land and Natural Resources
Administrative Proceedings Office
1151 Punchbowl Street, Room 130
Honolulu, Hawaii 96813
Phone: (808) 587-1496, Fax: (808) 587-0390
- DLNR's contested case hearing rules are listed under Chapter 13-1, HAR, and can be obtained from the DLNR Administrative Proceedings Office or at its website (<http://hawaii.gov/dlnr/rules/Ch13-1-Official-Rules.pdf>). Please review these rules before filing a petition.
- If you use the electronic version of this form, note that the boxes are expandable to fit in your statements. If you use the hardcopy form and need more space, you may attach additional sheets.
- Pursuant to §13-1-30, HAR, a petition that involves a Conservation District Use Permit must be accompanied with a \$100.00 non-refundable filing fee (payable to "DLNR") or a request for waiver of this fee. A waiver may be granted by the Chairperson based on a petitioner's financial hardship.

RECEIVED
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII
2010 SEP 20 P 12:09

A. PETITIONER		
(If there are multiple petitioners, use one form for each.)		
1. Name GLENN J. OAMILDA	2. Contact Person SAME	
3. Address 91-1179 Puamae'ole Street, 24V	4. City 'Ewa Beach	5. State and ZIP Hawaii'i 96706
6. Email imkanaka2@yahoo.com	7. Phone (808)-295-4860	8. Fax N/A

B. ATTORNEY (if represented)		
9. Attorney Name N/A	10. Firm Name	
11. Address	12. City	13. State and ZIP
14. Email	15. Phone	16. Fax

C. SUBJECT MATTER

17. Board Action Being Contested

Haseko (Ewa)'s request before the DNLR Board to amend from urban to conservation approximately a 4 acre parcel of shoreline where of Kaloi Gulch drainway terminates at One'ula / Hau Bush Beach Park, 'Ewa Beach, TMK 9-1-012.

18. Board Action Date

September 9, 2010; Land Board Meeting

19. Item No.

K2, Conservation and Coastal Lands

20. Nature and Extent of Petitioner's Interest That May Be Affected by the Board Action

The 'Ewa Beach Community Association (EBCA) requests DLNR Board concurrence for a public review of Haseko (Ewa)'s Environmental Impact Statement (EIS) that the changes made to the Plan is consistent and remains in full compliance with the on-going provisions and requirements of the Federal Consistency Program of the Hawai'i Coastal Zone Management (CZM), the Special Management Area Use Permit and the Navy Corp of Engineers. The developer's decision to physically downsize and shrink the marina has drastically changed the mauka water flow pattern from the 100-year flood and heavy rain water. The downsized and shrunken marina resulted in the realignment and reconfiguration the golf course, which originally ran east and west makai of Geiger Road at the upper most limits of the property. The golf course acted as the primary point of detaining and retaining mauka rains and flood waters. Further, whatever excess flood waters that passed through the golf course, the upper inland waterways would have served as the secondary retention and detention basin for the 100-year flood water and other waters mauka of the property, now the flood waters has a direct shot toward the ocean.

21. Any Disagreement Petitioner May Have with an Application before the Board

First of all, the 'Ewa Beach Community Association has opposed Haseko's decision to downsize and shrink the 'Ewa Marina, resulting in the realignment and reconfiguration of the golf course, and resulting in the elimination of the upper inland waterways that would have caught the excess mauka storm waters. If Haseko's request is approved it will put 'Ewa Beach, a coastal community with unlimited ocean resources, at a greater risk. And now the EBCA stands in stronger opposition to Haseko's request before this DLNR Board to open the shoreline which is considered to be the last four (4) remaining acres of Haseko's plan to remove flood, marina and housing development water off their property and into the ocean. The Kaloi Gulch, a natural channel drain way that is aligned perpendicular to the shoreline, now becomes the main confluence for all mauka flood waters, marina and housing development drainage waters that will terminate at the shoreline. Also, the plan to use the One'ula / Hau Bush Park as a flood zone, a catchment basin for the hundred year flood is totally unacceptable!

22. Any Relief Petitioner Seeks or Deems Itself Entitled to

Speaking in behalf of the 'Ewa Beach Community Association (EBCA), the community should have been given what was fairly negotiated in a Unilateral Agreement between Haseko, the developer, and the county of Honolulu. About ten (10) ago, a deal was consummated that gave Haseko owned nine (9) acres of shoreline property, plus one million dollars (\$1,000,000.00) to the county in exchange for golf course construction permits. To date, Haseko has completed building its world class golf course with professional golfer and designer Ernie Els' name inscriber on it. They got their's; what did the 'Ewa Beach community get in return? In fact, the beachfront property is currently being used by Haseko's contractors as a heavy equipment yard and a job storage lot for materials and supplies. And furthermore, where's the money? The EBCA ask the DLNR Board to request from Haseko: 1) an updated status report on the 9 acre parcel; 2) compensation for the usage of the property, as both storage and parking lot; 3) the restoration of the property to its original condition; 4) formal public announcement confirming an escrow bank account, to the previously agreed to million dollars

(\$1,000,000.00), as a community Benefits Package; and lastly, Haseko should be required to initiate a Water Retention Plan that would retain and detain waters on its own property rather than letting the waters flow freely into the ocean or the community park.

23. How Petitioner's Participation in the Proceeding Would Serve the Public Interest

Approval by the DLNR Board for the 4 acres at the shoreline from urban to conservation will open up the free unimpeded, unobstructed flow of flood, marina and housing waters directly into the ocean which will drastically alter the physical characteristics of 'Ewa Beach's One'ula / Hau Bush Park, and impact the near shore's flora and fauna. The community cannot be denied the continued benefits of ocean recreation and social activities, the traditional and cultural lifestyles of fishing and gathering and ocean cultural resource education. The EBCA has long been the main spokesperson for the people of the 'Ewa Beach community to insure that their political and social rights are preserved and protected. Therefore, the EBCA ask that the DLNR Board deny Haseko's request for the amended change.

24. Any Other Information That May Assist the Board in Determining Whether Petitioner Meets the Criteria to Be a Party under Section 13-1-31, HAR

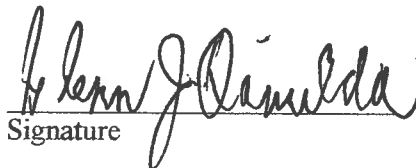
Served as member, board member, president of the 'Ewa Beach Community for over
Twenty-five (25), in this present capacity as President
Past chairman and present member of 'Ewa Neighborhood #23

☐ Check this box if Petitioner is submitting supporting documents with this form.

☒ Check this box if Petitioner will submit additional supporting documents after filing this form.

Glenn J. Oamilda

Petitioner or Representative (Print Name)



Signature

September 19, 2010

Date



STATE OF HAWAII
BOARD OF LAND AND NATURAL RESOURCES

PETITION FOR A CONTESTED CASE HEARING

RECEIVED
10 SEP 20 12:42

OFFICIAL USE ONLY	
Case No.	Date Received
Board Action Date / Item No.	Division/Office

DEPT. OF LAND
& NATURAL RESOURCES
STATE OF HAWAII

INSTRUCTIONS:

1. File (deliver, mail or fax) this form within ten (10) days of the Board action date to

Department of Land and Natural Resources
Administrative Proceedings Office
1151 Punchbowl Street, Room 130
Honolulu, Hawaii 96813
Phone: (808) 587-1496, Fax: (808) 587-0390

RECEIVED
DEPT. OF LAND
& NATURAL RESOURCES
STATE OF HAWAII
2010 SEP 22 A 8:45
DIVISION OF CONSERVATION
& COASTAL LANDS

2. DLNR's contested case hearing rules are listed under Chapter 13-1, HAR, and can be obtained from the DLNR Administrative Proceedings Office or at its website (<http://hawaii.gov/dlnr/rules/Ch13-1-Official-Rules.pdf>). Please review these rules before filing a petition.
3. If you use the electronic version of this form, note that the boxes are expandable to fit in your statements. If you use the hardcopy form and need more space, you may attach additional sheets.
4. Pursuant to §13-1-30, HAR, a petition that involves a Conservation District Use Permit must be accompanied with a \$100.00 non-refundable filing fee (payable to "DLNR") or a request for waiver of this fee. A waiver may be granted by the Chairperson based on a petitioner's financial hardship.

A. PETITIONER		
(If there are multiple petitioners, use one form for each.)		
1. Name Michael Kumukauoha Lee	2. Contact Person Michael Kumukauoha Lee	
3. Address 91-1200 Keaunui Drive, Unit 614	4. City 'Ewa Beach	5. State and ZIP HI 96706
6. Email keakuaskahu@yahoo.com	7. Phone 683-19545	8. Fax

B. ATTORNEY (if represented)		
9. Attorney Name	10. Firm Name	
11. Address	12. City	13. State and ZIP
14. Email	15. Phone	16. Fax

C. SUBJECT MATTER

17. Board Action Being Contested

Board of Land and Natural Resources Meeting of September 9, 2010 Amendments to Conservation District Use Permit OA-2670 to Construct a Marina Entrance Channel at Honouliuli-HASEKO

18. Board Action Date

September 9, 2010

19. Item No.

K-2

20. Nature and Extent of Petitioner's Interest That May Be Affected by the Board Action

Plat (1) 9-1-012, Established Native Hawaiian Traditional Cultural Practitioner in 'Ewa region protected by State of Hawai'i, Hawai'i Revised Statutes and judicial opinion.

21. Any Disagreement Petitioner May Have with an Application before the Board

Inadequate and inefficient government regulatory oversight of public trust resources thereby irreparably and unreasonably harming my ability to exercise my traditional and customary Native Hawaiian practices. DLNR/SHPD admission that 3-4 years of developer self-monitoring activities and loss and destruction of irreplaceable resources. Efficacy of DLNR/BLNR in properly identifying, assessing, mitigating natural, cultural and historical resources and traditional and customary Native Hawaiian practices pursuant to Ka Pa'akai Supreme Court Case and 1998 Supreme Court Memorandum Opinion on Haseko/'Ewa Marina and BLNR failures.

Significant Ali'i burial site identified in beach are to be destroyed by construction of marina entrance. Improper regulatory oversight and archaeological investigation of cultural and historic resources. This includes a failure to properly identify and protect the waihuna (fresh water springs) and the Karst, or underwater stream in the area of the proposed marina which can impact the shoreline area via alteration of the ebb and flow of fresh water into the ocean which is a critical component of the viability of the limu resources and diversity of marine life, all resources which my traditional Hawaiian practices rely upon, as well as impact the stability of the underground network of coral and limestone caverns and tubes which may impact cultural resources in the beach area as well. Fresh water, as the embodiment of the Hawaiian akua Kane, was and is still sacred as a life giving element. The impacts to the fresh water and brackish water lens is still indeterminate since issues were raised over fifteen years ago. The obliteration of the historic and cultural sites, the "accidental" destruction and alteration of sites committed to be preserved, the "accidental" destruction of the endangered candidate opae'ula sinkhole, the discovery of a highly significant ali'i burial site at the proposed marina entrance, the high potential for toxicity and anoxic conditions to develop in a reduced marina with more stagnant water and less circulation, and the SHPD admission that it failed to monitor the destruction of the cultural landscape for years should raise a serious red flag with the BLNR as to the upholding of constitutional, statutory and judicial mandates in this matter. I am competent to testify to the matters herein, and unless otherwise indicated, I make this declaration based upon personal knowledge.

- I am a Papakilohökü and a Native Hawaiian practitioner of limu medicine and a practitioner of the Hä;
- My knowledge of limu was taught to me by my grandfather, Kino Guerrero and Uncle Walter Kamana;
- My knowledge of Hä comes from Auntie Alice Holokai;
- I possess knowledge of the kaona of the 2102 lines of the Kumulipo;
- I am compelled to come forward at this time to reveal certain facts regarding significant

Native Hawaiian cultural sites due to the threat of imminent harm, alteration, and destruction of these sacred sites;

- The complex of sites addressed in this specific declaration are located in 'Ewa on the Island of O'ahu;
- These sites are associated with Kalanikupule and his wives;
- These sites are associated with Kaumuali'i and Kahekili;
- These sites are associated with Captain Henry Barber and the ship Arthur;
- These sites are associated with the Battle of Kuki'iahu and Kaeokulani;
- These sites are directly associated with the aftermath of the Battle of Nu'uanu Pali in 1795;
- Some of the sites include burial sites including the burial site of Kaeokulani;

22. Any Relief Petitioner Seeks or Deems Itself Entitled to

Proper identification and protection of historic and cultural sites. Protection of exercise of my religious and traditional and customary native Hawaiian practices and historical, cultural and natural resources my practices rely upon. As noted by OHA, the remedies of which the BLNR could administer as conditions of its permit review or approval include, but are not limited to:

- Require further and extensive archaeological investigation of the area of the proposed marina entrance prior to HASEKO coming back to the BLNR to request the final approval to break through the beach;
- Require restoration of the historic sites destroyed by HASEKO;
- Require restoration of the opae'yula habitat as initially conditioned by the Army Corps of Engineers in their agreement;
- Require the SHPD to fulfill their statutory responsibilities in investigating, monitoring, identifying and protecting the traditional cultural landscape in One'yula;
- Require a supplemental EIS or advanced study of the potentially anoxic effects of reducing the water volume in the reduced marina.
- Development of a five-point model for measuring oxygen levels throughout the reduced marina design plan to address the potential for anoxic conditions.

Follow through on O'ahu Island Burial Council recognition of significant ali'i burial complex in the area of the proposed 'Ewa Marina and underground water resources, such as the underground stream (Karst) which was breached by Haseko, be inspected and corrected.

23. How Petitioner's Participation in the Proceeding Would Serve the Public Interest

The Legislature has found that historic sites and especially unmarked burial sites are at increased risk of destruction and it serves the public interest to protect and preserve the traditional cultural landscape. Furthermore, the Constitution of the State of Hawai'i, in Article 12, Section 7, protects the exercise of traditional and customary practices and inherently, the resources these practices rely upon. My connection to 'Ewa, the individuals buried in the unmarked burial areas, the knowledge I possess of traditional uses of the resources in the area, like limu, are important to the general public as there are established healing properties for many common and fatal diseases society is afflicted with. Preserving the cultural heritage of Hawaii is important to the well being of the populace. Article XII, Section 7, of the Constitution of the State of Hawaii states:

TRADITIONAL AND CUSTOMARY RIGHTS, Section 7. The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.

[Add Const Con 1978 and election Nov 7, 1978]

Notwithstanding the strong Constitutional mandates and statutory obligations set forth to recognize the duties of the State of Hawai'i and its sub-agencies to protect the traditional and customary rights of native Hawaiians and Hawaiians, the Hawaii Supreme Court has set forth judicial guidance and interpretation in this regard as well.

In *Public Access Shoreline Hawai'i vs. Hawai'i County Planning Commission (PASH)*, 79 Hawai'i 425 (1995), hereinafter PASH, the Hawaii Supreme Court, recognizing over 150 years of court decisions validating the existence of Native Hawaiian traditional and customary rights as part of the state's common law, reiterated that:

The State is obligated to protect the reasonable exercise of customarily and traditionally exercised rights of Hawaiians.

In *Ka Pa'akai O Ka 'Āina v. Land Use Commission*, 94 Haw. 31 (2000), hereinafter *Ka Pa'akai*, the Hawaii Supreme Court, again noting it was clear that the State and its agencies are obligated to protect the reasonable exercise of customarily and traditionally exercised rights of Hawaiians, to the extent feasible, noted the findings of the Hawaii State Legislature in 2000 that:

[T]he past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture. The legislature further finds that due consideration of the effects of human activities on native Hawaiian culture and the exercise thereof is necessary to ensure the continued existence, development, and exercise of native Hawaiian culture. Act 50, H.B. NO. 2895, H.D. 1, 20th Leg. (2000).

The *Ka Pa'akai* court also noted:

With regard to native Hawaiian standing, this court has stressed that "the rights of native Hawaiians are a matter of great public concern in Hawai'i." *Pele Defense Fund v. Paty*, 73 Haw. 578, 614, 837 P.2d 1247, 1268 (1992), certiorari denied, 507 U.S. 918, 113 S. Ct. 1277, 122 L. Ed. 2d 671 (1993).

The *Ka Pa'akai* court also set forth an analytical framework, in that instance for the LUC to adhere to, but in the spirit and intent of the law, a framework that all State and County entities should follow, especially the BLNR, which is espoused as follows. The proper analysis of cultural impacts should include:

1) the identity and scope of "valued cultural, historical, or natural resources" in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area; (2) the extent to which those resources -- including traditional and customary native Hawaiian rights -- will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the (agency) to reasonably protect native Hawaiian rights if they are found to exist.

Via this Petition, I am helping the BLNR fulfill their duty on behalf of the public.

24. Any Other Information That May Assist the Board in Determining Whether Petitioner Meets the Criteria to Be a Party under Section 13-1-31, HAR

I have been granted standing in the Papipi Road issue and Kalo'i Case issue, before this very same BLNR for the very same area ('Ewa) and same development. (Haseko) I have also been recognized as a cultural descendant by the O'ahu Island Burial Council to this very same area and the primary informant for the ali'i burial complex and heiau which the OIBC officially recognized. I have a very strong, distinct and vested interest in this area.

☒ Check this box if Petitioner is submitting supporting documents with this form.

☒ Check this box if Petitioner will submit additional supporting documents after filing this form.

MICHAEL KUMUKIAUOHA LEE *Michael Kumukiauha Lee* Sep. 17, 2010
Petitioner or Representative (Print Name) Signature Date

High court upholds burial site challenges

Justices rule that native Hawaiians can appeal plans for remains

BY HEN KOBAYASHI
hkobayashi@staradvertiser.com

Native Hawaiians have the right to challenge construction plans that disturb Hawaiian burial sites, the Hawaii Supreme Court ruled yesterday.

The court held that native Hawaiians can turn to the state Board of Land and Natural Resources to appeal decisions by the Oahu Island Burial Council that approve a developer's treatment plan for burial remains.

"We're quite pleased," Native Hawaiian Legal Corp. lawyer David Kimo Frankel said of the 59-page opinion written by Chief Justice Ronald Moon. "It reinforces that native Hawaiians have a right to a contested case hearing when their cultural practices are impacted."

The case involves General Growth's development of the Ward Villages Shops in Kakaako, although yesterday's ruling isn't expected to disrupt construction, which resumed last month.

Paulette Kaleikini, a native Hawaiian cultural practitioner, earlier settled her lawsuit challenging the construction, which had been delayed after the discovery

Please see Ruling, B3



Ruling: Native Hawaiians can appeal burial site plans

Continued from B1

of burial sites on the property.

But the high court ruled that the case was not "moot" because decisions relating to native Hawaiian burial sites are of "great public importance." It also said the issue will likely recur because native Hawaiian remains will probably be found in future construction projects.

Before she settled the lawsuit, Kaleikini wanted to challenge the 2006 burial council's approval of General Growth's plans for the remains.

During its hearings, Kaleikini told the Burial Council that a key aspect of native Hawaiian practice is ensuring that remains are left undisturbed and receive proper care and treatment. She said General Growth should have made a better attempt to redesign the project.

General Growth, however, said the project didn't leave much room for redesign and proposed to relocate the remains to an area where they would be safe.

Kaleikini asked the land board to hear her challenge of the Burial Council's decision, but Peter Young, chairman of the land board at the time, denied the request.

In its ruling, Moon wrote that the contested case hearing was required by state law.

"The ruling explains the law and tells the Department of Land and Natural Resources exactly what we have been telling them to do: to give native Hawaiians a contested case hearing when they are going to take burials out of the ground," he said.

He said the decision explains developers can also contest the Burial Council's decisions.

But he said it underscores



"Unfortunately, the decision comes too late to keep the ones in the ground that should have stayed in the ground."

Ronald Moon
Chief Justice of the
Hawaii Supreme Court

the value of developers conducting a "good archaeological survey" before they decide where to construct their projects.

"Unfortunately, the decision comes too late to keep the ones in the ground that should have stayed in the ground," he said. Some of the remains were moved to another location on the property.

"Hopefully, this won't ever happen again," he said.

Associate Justices Paul Nakayama and James Duffy joined Moon in the opinion. Associate Justices Mark Recktenwald and Simeon Acoba wrote separate concurring opinions.

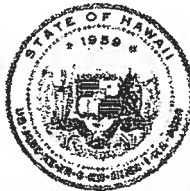
The state Attorney General's Office did not have any immediate comment yesterday.

Star Advertiser Newspaper Honolulu Hawaii (Tuesday August 17, 2010)

The Star Advertiser Tuesday August 19, 2010

6

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

MEMORANDUM

April 7, 2010

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

LOG NO: 2010.0875
DOC NO: 1004AJ02

To: All Council Members, O'ahu Island Burial Council

From: Phyllis Coochie Cayan, History and Culture Branch Chief *P. Coochie Cayan*

Subject: **Department's recommendation to recognize the applicant below as a Cultural Descendant to Unidentified Native Hawaiian burials in the Ahupua'a of Honouliuli, Ewa District, Island of O'ahu.**
TMK: (1) 9-1-011: 001 thru 007; 9-1-012: 008,009,011,012,013,016,017.

For the purpose of establishing and substantiating cultural descent claim to unidentified Native Hawaiian remains located at Honouliuli, Ewa and located in the above parcel. The following applicant has submitted genealogical information to the State Historic Preservation Division (SHPD) for assessment and verification pursuant to the Hawai'i Administrative Rules (HAR) 13-300-35:

1. Michael Kumukauoha Lee

The applicant has established adequate cultural genealogical connections to the following individuals who once owned land, lived and/or resided in the ahupua'a of Honouliuli. The aforementioned applicant is a direct descendant from Kaikioahu (k); and the grandson of Kaikioahu (k) was Kinopu (k). Kinopu was buried in Honouliuli, Ewa, O'ahu. Furthermore, the documentation provided by the aforementioned applicant states that his aforementioned family lived within the ahupua'a of Honouliuli.

Therefore, the department recommends that the O'ahu Island Burial Council (OIBC) recognize Michael Kumukauoha Lee as a Cultural Descendant to Unidentified Native Hawaiian burials in the Ahupua'a of Honouliuli, Ewa District, Island of O'ahu, at TMK: (1) 9-1-011: 001 thru 007; 9-1-012: 008, 009,011, 012, 013, 016, 017.

7

#

documented that research with copies to the OIBC, to OHA and to SHPD. Mr. Lee commenced to do a review of his documents (handouts distributed) to clearly illustrate his genealogical links to the known burials in this area.

Motion by Shad Kane, seconded by Steve Hoag to accept the department's recommendation to recognize Michael Kumukauoha Lee as a cultural descendant to known burials at One'ula Beach, Honouliuli Ahupua'a, 'Ewa Moku at TMK: (1) 9-1-011:001 to 007; 9-1-012: 008, 009, 011, 012, 013, 016, 017.

VOTES were nine unanimous yeas. No nays. No kanalua.

Motion passed unanimously to accept the department's recommendation to recognize Michael Kumukauoha Lee as a cultural descendant to known burials at One'ula Beach, Honouliuli Ahupua'a, 'Ewa Moku at TMK: (1) 9-1-011:001 to 007; 9-1-012: 008, 009, 011, 012, 013, 016, 017.

Public testimony from Tom Shirai who supported this motion.

Motion by Leimaile Quiteves, seconded by Aaron Mahi to move the OIBC into executive session. Votes were unanimously ayes in favor of the motion. No nays. No kanalua. The motion to move into executive session passed by unanimous vote.

Note: The general public left the meeting room at about 1:00 p.m. Mr. Lee allowed several 'ohana to remain in the room while he shared the more documents of his genealogy to the known burials at the aforementioned TMK parcels.

Note: Councilmember Greenwood departed at 2:00 p.m. There were eight council members remaining that met the quorum criteria.

Motion by Aaron Mahi, seconded by Cy Bridges to move the OIBC out of executive session. Votes were unanimously in favor of the motion. The motion passed by unanimous votes.

Note: At 2:30 p.m. the OIBC came out of executive session.

Chairman McKeague thanked the remaining public for their patience. Council member Abad summarized that Mr. Lee and his 'ohana provided oral and written genealogy information to

further his connection to the known burials for the OIBC's consideration.

Motion by Abad, seconded by Quiteves to move that the OIBC urge the SHPD to recognizes as a previously identified burial site the wahi kapu or sacred burial and religious complex at One'ula, Honouliuli, O'ahu that comprise seven burial locations and their immediate archaeological and cultural contexts and that include the burials of Ka'eokulani, Kalanikupule, Kaomileika'ahumanu, and other related ali'i identified in testimony, both written and oral, by Michael Kumukauoha Lee and his 'ohana, as depicted in his markup map of PHRI map, Figure 1, "Project Area and Site Locations," in Report 1387-04159.

Vote was eight unanimous yeas. No nays. No kanalua.

The motion as stated above passed by unanimous vote.

Note: Council member Abad departed at 2:35 p.m. Quorum was maintained with seven members.

D. Island Burial Councils Collective Agreement for Advocacy and Development of Guidelines and Best Management Practices. Information/Discussion/Recommendation.

Chairman McKeague reported that this item was an outcome of a teleconference with all the island burial chairs (Kimo Lee of Hawaii, Malia Akutagawa of Molokai, Charles Maxwell of Maui, Kunane Aipoalani of Kauai). Ms. Akutagawa emailed this draft document for input from the other councils as an effort to establish guidelines and work together with everyone's combined experiences.

Deputy AG Ishikawa supported this effort for all the councils to go forth and develop guidelines with public input/hearings. Ishikawa said the AG's will kokua too.

E. Draft Federal Department of Interior "Draft Native Hawaiian NAGPRA Protocol." Information/Discussion/Recommendation.

This item was tabled by the chairman as copies were distributed.

Note: Chairman McKeague deferred Item VIII. Committee Reports to hear the reports of Item IX. due to time constraints.

VIII. COMMITTEE REPORTS

- | | |
|---|----------------------------|
| A. OIBC Legislative Committee. | Discussion/Recommendation. |
| B. Kaena Point Advisory Council. | Discussion/Recommendation. |
| C. Section 106/NAGPRA Correspondence. | Discussion/Recommendation. |
| D. OIBC Task Force on Environmental Reviews. | Discussion/Recommendation. |

Confidential*** Not for distribution*** Confidential
SUMMARY OF THE EXECUTIVE SESSION
O'ahu Island Burial Council
APRIL 10, 2010

Start Time: 1:00 p.m.

Motion by Leimaile Quiteves, seconded by Aaron Mahi to go into executive session.
Votes were Unanimous ayes in favor of the motion. No nays. No kanalua.
The motion to move into executive session passed by unanimous vote.

Agenda item for discussion in Executive Session

VII. NEW BUSINESS

- D. Burial Site Identification for Known Burials at One'ula Beach, Honouliuli Ahupua'a, 'Ewa Moku.
TMK: (1) 9-1-011:001 to 007; 9-1-012:008, 009, 011, 012, 013, 016, 017.
Information/Discussion/Recommendation.

Mr. Michael K. Lee distributed supporting confidential documents with his genealogy to the OIBC and a map indicating known burials at One'ula Beach, Honouliuli Ahupua'a, 'Ewa Moku at the aforementioned TMKs.

Others who remained during this executive session by Mike Lee are genealogically linked to him were: Tom Shirai, Manny Kuloloio, Alika Silva, Uncle Paulo and Tom Lenchanko. OHA Staffers who worked with Mr. Lee and remained were Kai Markell, Jerome Yasuda and Jennifer Gonzales.

Mr. Lee proceeded to go through his genealogy to show his connections to the known burials at the aforementioned TMK parcels. Others were allowed to share how they helped Mr. Lee in his research over the past year with cultural mana'o that is not usually shared with the general public.

Note: Council member Greenwood departed at 2:00 p.m. A quorum of eight (8) council members was maintained.

Motion was made by Aaron Mahi, seconded by Cy Bridges to move the OIBC out of executive session. Votes were unanimously ayes in favor of the motion. The motion passed by unanimous votes.

End time: At 2:30 p.m. the OIBC came out of executive session.#

Note: From the regular minutes this is the action that transpired from the executive session.

Chairman McKeague thanked the remaining public for their patience. Council member Abad summarized that Mr. Lee and his 'ohana provided oral and written genealogy information to further his connection to the known burials for the OIBC's consideration.

Motion by Abad, seconded by Quiteves to move that the OIBC urge the SHPD to recognize as a previously identified burial site the wahi kapu or sacred burial and religious complex at One'ula, Honouliuli, O'ahu that comprise seven burial locations and their immediate archaeological and cultural contexts and that include the burials of Ka'eokalani, Kalanikapule, Kaomileika'ahumanu, and other related ali'i identified in testimony, both written and oral, by Michael Kumukauoha Lee and his 'ohana, as depicted in his markup map of PHRI map, Figure 1, "Project Area and Site Locations," in Report 1387-04159.
Vote was eight unanimous yeas. No nays. No kanalua.
The motion as stated above passed by unanimous vote.

MORIHARA LAU & FONG LLP

A LIMITED LIABILITY LAW PARTNERSHIP

January 15, 2009

Ms. Laura Thielen, Chairperson,
and Members of the Board of Land and Natural Resources
1151 Punchbowl Street
Honolulu, Hawaii 96813

RECEIVED
OFFICE OF CONSERVATION
AND COASTAL LANDS
2009 JAN 15 P 1:34
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

Re: Amendments to CDUP OA-2670

Dear Chairperson Thielen and Board Members:

This is to inform the Board of Land and Natural Resources (Board) that Haseko (Ewa), Inc., the holder of CDUP OA-2670, authorizing the construction of a marina entrance channel for the Hoakalei Marina at Honouliuli, Oahu, hereby withdraws its request to reduce the size of the marina from 70 acres to 53.76 acres.

Haseko's request to reduce the size of the marina to 53.76 acres was submitted to the Board in October 2006. The purpose for reducing the amount of wetted area was to increase the amount of open public spaces around the marina waterway to provide opportunities for an array of diverse activities inviting not only to persons interested in boating and ocean recreation, but also drawing people there for cultural and community gatherings. Haseko envisioned that a promenade around the marina waterway would include venues for cultural programs, displays, educational signs and kiosks, and other features concentrating on `Ewa's prehistory and history, coastal and maritime matters, and Native Hawaiian cultural and natural resources.

On February 22, 2008, the Board approved the reduction in the size of the marina to 53.76 acres, along with amendments to three conditions of CDUP OA-2670. During the February 22 meeting, Michael Lee orally requested a contested case on the reduced-size marina. Mr. Lee perfected his request by filing a written petition for a contested case within the required time period, identifying as his concern the protection and preservation of archaeological and cultural sites.

At the Board meeting held on December 12, 2008, the Office of Conservation and Coastal Lands (OCCL) recommended that Mr. Lee's request be denied for lack of standing because his identified interests are not affected by the Board's action in approving the reduced-size marina. At that December 12 meeting, however, Mr. Lee raised additional and different reasons why he should be entitled to a contested case hearing. Notwithstanding the fact that it was many months after the time for filing a

11



"Kai Markell"
<kaim@oha.org>
03/04/2010 09:21 AM

To <Phyllis.L.Cayan@hawaii.gov>
cc
bcc
Subject RE: One'ula...

Mahalo Coochie! The TMK was the one below: Ocean Point Project Land, of Honouliuli, 'Ewa District Island of O'ahu (TMK:9-1-012:various) It was the ali'i burial which OHA has custody of, including the burial artifacts....Sara and Muffet at one point scanned the artifacts on a scanner and made a CD/DVD which I think Holly or Martha may have at State Parks for some reason according to Mike....Keola and I are in managerial training tomorrow but we want to make time to come help file stuff...just have to figure out when....mahalo, kai

*Kai Markell
Compliance Manager
Office of Hawaiian Affairs
711 Kapi'olani Blvd. Suite 500
Honolulu, Hawai'i 96813
(808) 594-1945
kaim@oha.org*

From: Phyllis.L.Cayan@hawaii.gov [mailto:Phyllis.L.Cayan@hawaii.gov]
Sent: Thursday, March 04, 2010 9:09 AM
To: Kai Markell
Cc: Phyllis.L.Cayan@hawaii.gov
Subject: Re: One'ula...
Importance: High

Aloha Kai,

Yes once we have a TMK we can research the information Mike needs for you all. As you know, its all filed under TMK here.
Tomorrow (furlough Friday) SHPD is having a mass filing and organizing of the files by volunteers under Nancy's direction.

So looking for the files and/or reports will be much easier next week.
Send the TMK...by the way, what do you mean by artifacts? as in physical items here at SHPD?

a hui hou, Coochie

Phyllis Coochie Cayan
History and Culture Branch Chief
Office: 808-692-8025

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any review, use, disclosure, or distribution by unintended recipients is prohibited. If you are not the intended recipient, please contact the

sender by reply e-mail and destroy all copies of the original message.

"Kai Markell" <kaim@oha.org>

To <Phyllis.L.Cayan@hawaii.gov>

cc

Subject One'ula...

03/04/2010 09:04 AM

Aloha Coochie!

Mike Lee mentioned to me that if I sent the TMK for the One'ula burial: Ocean Point Project Land, of Honouliuli, 'Ewa District Island of O'ahu (TMK:9-1-012:various) and officially requested a copy of the scanned artifacts from SHPD/State Parks, I could get one...is that right? Mahalo! :) kai

*Kai Markell
Compliance Manager
Office of Hawaiian Affairs
711 Kapi'olani Blvd. Suite 500
Honolulu, Hawai'i 96813
(808) 594-1945
kaim@oha.org*

0-1500

TMK
9-1

**BURIAL TREATMENT PLAN
HAWAIIAN BURIAL CAVE SITUATED AT
ESTATE OF JAMES CAMPBELL LANDS
HONOULIULI, 'EWA, O'AHU
(TMK 9-1-14:002)**

by

Hallett H. Hammatt, Ph.D.

Prepared for Approval by the

O'ahu Island Burial Council
State Historic Preservation Division
Department of Land and Natural Resources

Cultural Surveys Hawaii
December 1994

14

I. INTRODUCTION

In February 1994, heavy machinery belonging to Hawaiian Cement collapsed and ~~partially~~ filled a portion of a sinkhole containing bones and a plank from a traditional ~~Hawaiian~~ canoe. Some of the skeletal remains are human, and in all likelihood, those of ~~ancestral~~ Native Hawaiians. All work in the immediate vicinity of the sinkhole ceased and ~~no further~~ work occurred.

Two site inspections by staff of the State Historic Preservation Division (SHPD) took place soon thereafter to review the extent of damage caused to the cave. A recommendation ~~was made~~ by SHPD to the landowner to develop a burial treatment plan for presentation to ~~the~~ Oahu Island Burial Council for a determination to preserve the burial cave in place ~~including~~ recommendations to seal the entrance.

The parcel at issue is situated in the *ahupua'a* of Honouliuli, in the *moku* of Ewa, on ~~the island~~ of Oahu at Tax Map Key 9-1014:002. The landowner is The Estate of James ~~Campbell~~ and Hawaiian cement is presently quarrying in the surrounding area.

The following burial treatment plan is presented for review and approval by the Oahu ~~Island~~ Burial Council. In summary, the plan calls for the remains to be protected in place by ~~closing~~ the sink hole with natural stone from the surrounding area thereby sealing the site. ~~A permanent~~ buffer zone will be established around the sinkhole burial site and the area will ~~be fenced~~ off. No landscaping is recommended for the site.

TABLE OF CONTENTS

LIST OF FIGURES	ii
INTRODUCTION	1
PAST ARCHAEOLOGICAL WORK	2
PROPOSED BURIAL TREATMENT	5
A. Legal Notices	5
B. Protection In Place and Blessing	5
C. 100-Foot Permanent Buffer Zone	6
D. Chain Link Fence Around Buffer Zone	6
SUMMARY	7
REFERENCES CITED	8
INDEX ATTACHED DOCUMENTS	9

I. INTRODUCTION

In February 1994, heavy machinery belonging to Hawaiian Cement collapsed and filled a portion of a sinkhole containing bones and a plank from a traditional canoe. Some of the skeletal remains are human, and in all likelihood, those of Native Hawaiians. All work in the immediate vicinity of the sinkhole ceased and further work occurred.

Two site inspections by staff of the State Historic Preservation Division (SHPD) took place thereafter to review the extent of damage caused to the cave. A recommendation by SHPD to the landowner to develop a burial treatment plan for presentation to the Oahu Island Burial Council for a determination to preserve the burial cave in place and recommendations to seal the entrance.

The parcel at issue is situated in the *ahupua'a* of Honouliuli, in the *moku* of Ewa, on the island of Oahu at Tax Map Key 9-1014:002. The landowner is The Estate of James [redacted] and Hawaiian cement is presently quarrying in the surrounding area.

The following burial treatment plan is presented for review and approval by the Oahu Island Burial Council. In summary, the plan calls for the remains to be protected in place by filling the sink hole with natural stone from the surrounding area thereby sealing the site. A buffer zone will be established around the sinkhole burial site and the area will be fenced off. No landscaping is recommended for the site.

17

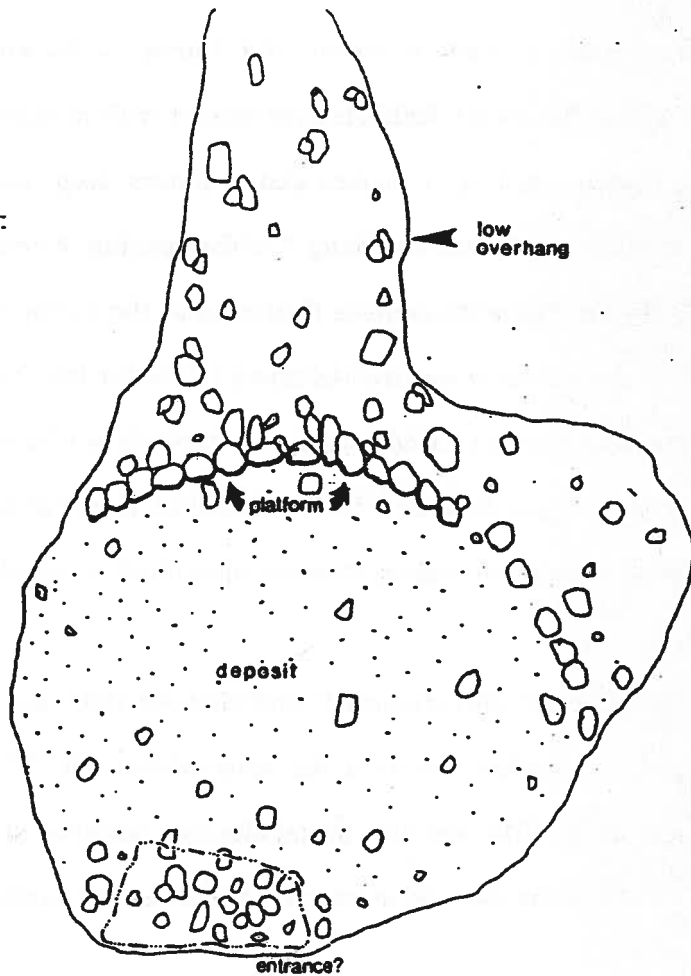
II. PAST ARCHAEOLOGICAL WORK

In December 1976, Aki Sinoto of the Bishop Museum completed a cultural resources survey of parcels 4, 8 and a portion of 2. Survey of the subject parcel 2 identified a site which is a limestone sinkhole/cave shelter with modified interior, 35 meters W [west] measures 2 by 1 meters and 2 meters deep. Large circular area, 5 meters in diameter occurs under the overhang N of the opening. A smaller raised floor area continues for 1 meter. Where the bedrock floor rises at the perimeter of the initial interior floor, a raised platform is constructed about 0.6 meter [sic] high. A possible step is built into the center of this feature. Good deposit on interior floor of circular area. This feature is rather unique in the Project Area from both archaeological and geological aspects" (Sinoto 1976:26; It was given the Bishop Museum identification number B6-137.

In December 1991 (Hammatt and Shideler 1991) and in 1994 (Hammatt *et al.* 1994), a survey worked occurred for sites within the "Proposed Barbers Point Harbor Expansion Area." The sinkhole burial site was assigned state site number 50-80-09-9633. Figure 2 depicts the site and surrounding area as it was drawn for the 1994 study.

In February 1994, the sinkhole burial site was impacted by heavy machinery dumping Hawaiian cement. The impacts consisted of filling the site with soil and debris including large coral stones. A site inspection was conducted by Dr. Tom Dye, SHPD O'ahu Archaeologist and Assistant O'ahu Archaeologist Elaine Jourdane at which time the presence of human bones, including human skeletal remains were visually confirmed.

18



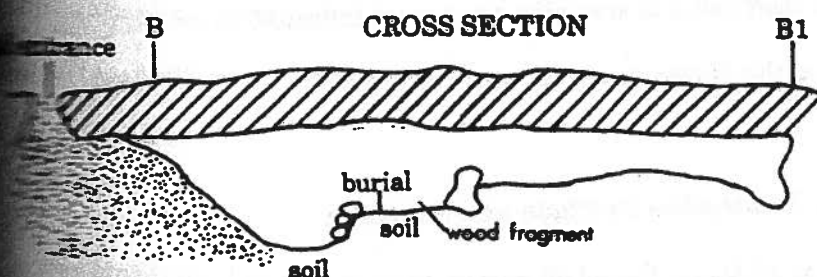
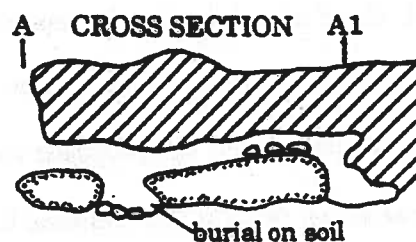
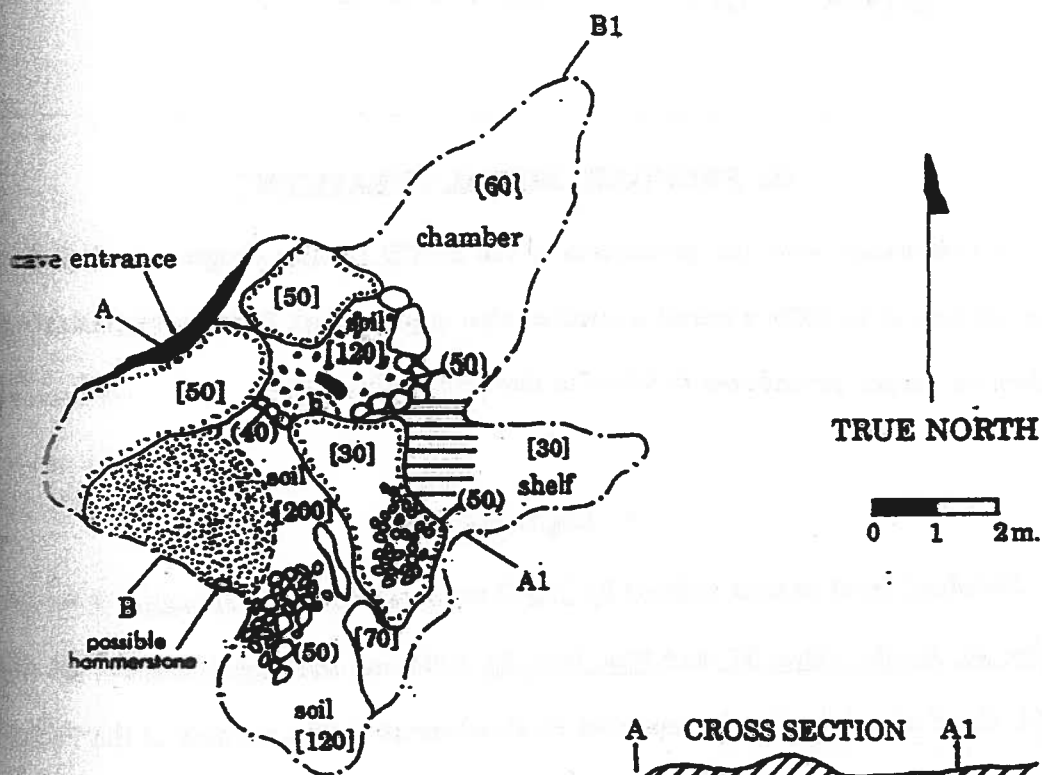
0 1 2
scale: meters



HONOULIULI, OAHU
50-Oa-B6-137
July 1976

Plan of Site B6-137

19



LEGEND

- | | |
|----------------------------------|----------------------------|
| --- extent of cave | b burial |
| ▨ cobble and pebble paving | ▬ carved wood fragment |
| ○ outcrop boulder | [50] ceiling height in cm. |
| ▨ modern dirt fill from entrance | (50) height in cm. |
| ∞ retaining wall | ▨ cave ceiling |

Plan of Site 50-80-12-9633 (Bishop Museum B6-137)

III. PROPOSED BURIAL TREATMENT

In accordance with the procedures of the SHPD Burials Program and Chapter 6E sections 43 and 43.5, HRS, a burial treatment plan is presented. Burials Program staff were consulted on proper procedures to follow in developing the plan.

A. Legal Notices

Standard legal notices utilized by SHPD were placed in the *Honolulu Advertiser* on Sat. Nov. 26, Sunday, Nov. 27 and Wed. Nov. 30, 1994 and the August issue of *Ka Wai Ola* OHA. Proof of publication is appended as attachment 3. The purpose of the notice is to inform families of ancestral Hawaiians whom once lived in Honouliuli that the burial cave has been identified and the proposed treatment for the cave is to seal the entrance by filling with coral stone. Individuals claiming lineal and/or cultural descent were directed to contact the SHPD Burials Program staff cultural specialist to present information relating to lineal and/or cultural affiliations to the Hawaiian ancestors of Honouliuli.

B. Protection In Place and Blessing

The landowner, Estate of James Campbell agrees to protect the burial cave in place by filling the opening with a combination of soil and coral stone. This work will be conducted following a blessing by interested members of the Council or a designated *kahu*. The blessing will include an apology for any adverse impacts. It should be made clear that at no time did the Estate of James Campbell or Hawaiian Cement remove any skeletal remains from the burial site.

C. 100-Foot Permanent Buffer Zone

A maximum 100-foot permanent buffer zone circumventing the burial site is proposed. Activities except access for visitation by recognized lineal and/or cultural descendants or the inspection by staff of the SHPD and the Estate of James Campbell will occur within the permanent buffer zone.

D. Chain Link Fence Around Buffer Zone

In addition, a four-sided, standard height, chain link fence is proposed to surround the site with a gate. The gate will include a lock whose key will be kept by the Estate of James Campbell. Lineal and/or cultural Descendants or staff wishing to visit the site need to make prior arrangements with the landowner to obtain authorization to access the site and pick up the key.

E. Possible Signage

Should signage be recommended by the Council, the landowner recommends a sign simply saying, "KAPU" be placed on the center of the four sides of the fence. Such a sign will not draw undue attention to the burials contained in the cave but at the same time will make it clear the site is to be left alone.

IV. SUMMARY

The Estate of James Campbell agrees to the responsibility for protection of human remains in this sinkhole cave as set forth in this plan. The proposals in the plan are intended to achieve the care and protection of these remains in their original place of burial. These thoughts and feelings that this burial treatment plan is put forth.


23

V. REFERENCES CITED

Hammatt, Hallett H., David W. Shideler, Melody Heidel, and Mark Stride
1994 *Archaeological Inventory Survey of the Proposed Barber's Point Harbor Expansion (TMK 9-1-14:02)*, Cultural Surveys Hawaii, Kailua, HI.

Hammatt, Hallett H. and David W. Shideler
1991 *An Archaeological Assessment for the Proposed Barber's Point Harbor Expansion (84 acres), Honouliuli, Ewa, O'ahu*, Cultural Surveys Hawaii, Kailua, HI.

Sinoto, Aki
1976 *Barbers Point Cultural Resources Survey*, Bernice Pauahi Bishop Museum, Honolulu, HI



DR. JAY T. KANEGAWA, D.M.D. • 488-4017 • 99-155 Moanalua Rd.
 Our Patients make us the best! Thank you, Hawaii!
 New Patients Welcome!
 Teeth Whitening • Dental Implants • Preventive Care • Full Cosmetic Service

Other editions: Mobile | E-news alerts | RSS | Twitter

Find it: Site Map | Coupons | Apartments | Dating | Jobs | Cars | Real estate | Classifieds | Shopping | Subscribe

hawaiiadvertiser.com

Find what you are looking for ...

Search

Sponsored by:
momslife.com

Thursday, March 4, 2010

HOME LOCAL NEWS SPORTS BUSINESS MY ADVERTISER ISLAND LIFE TGIF OPINION MULTIMEDIA BLOGS/FORUMS CLASSIFIED ADS HELP



Comment, blog & share photos

Log in | Become a member

HAWAII'S **Complete** SOURCE**BLOGS >> CULTURAL KAPOLEI****Posts Tagged 'Sinkholes'****Kanehili: Sinkholes...ancient bird bones...Dr. Alan Ziegler**

Thursday, October 2nd, 2008

It sometimes amazes me how some things I heard or had seen as a child I can remember as clearly as if it was yesterday. Things I never gave much thought or even interest at the time. It had come and gone as quickly as the wind or a rising tide. We live out our lives alone. We enter it alone and leave it alone. We all have a trail to follow. It may all seem strange or even puzzling. But there is a plan. For along this path there are others following close by. Some enter this path before we do and leave it before we do. We are all however moving in the same direction. But there is someone there watching us all the while. Some of us call him the "Great Spirit", some call him "Ke Akua", or "Jehovah", "Ala". He has many names. He is there to keep us on the trail like a mother watching a child. There will be times in our lives when we will have an opportunity to meet those who are on the same path. We may gently bump into each other without even knowing, providing the "mana" we each need to keep going. We only need to recognize them when we see them. I have known many.....this is the story of one such person.....His name is Alan Ziegler.

I met Alan Ziegler (right, at his home in Kailua) a number of years ago when I attended one of his site tours at an 8-acre sinkhole preserve in Campbell Industrial Park. I think it is something less than 8 acres although it does bear his name today as the "Alan Ziegler Preserve". Much of what I have been sharing over the past few years in these cultural essays has to do with the historical period of the Hawaiian occupation of these islands. There is very little that anyone knows for sure prior to this period. Much of it is speculation. I am sure that there must have been some work and research prior to the arrival of these people from the southern latitudes whoever they might have been. However it wasn't until I met Ziegler that I had come to learn and appreciate much of what had occurred prior to these southern arrivals. He had opened a whole new world to me. Perhaps the only thing that I was aware of was that the early people lived and evolved in isolation from the rest of the world. That is the same story for our native plants and animals. The closest land was perhaps 5,000 miles away. For this reason they evolved without any natural defenses. The people evolved without any of the immunities or defenses to illnesses such as the common cold. They ate very little red meat and their diets consisted mainly of plants and fish. Their filtered water was clean and fresh whether it was gathered at its source or in sinkholes. The distance the water traveled from the mountains to the sea whether it was on the surface in depressions or through the porous Ewa limestone karst was short. Some of us may be familiar with the many native plants, birds, animals and insects that existed, many of which today are extinct. This was the world of Alan Ziegler. The prehistoric world of Alan Ziegler's Hawaii.

It is perhaps at this point that I think it might be a good idea to help all of us understand this ancient place named Kanehili and its relationship to Ziegler's Ewa Karst. There are several unique aspects of this place that defines it in terms of its geographic region. It is important to understand that when Mailikukahi structured the Moku and Ahupua'a geographical boundaries it was all done in terms of water. The "Wai 'O Kane", or "Waters of Kane", as it travelled on its path from the mountains to the sea. There are exceptions though. In most situations the waters of Kane travels along natural depressions formed in its huakai or journey to the sea. Although Kanehili is believed to be an Ili and not an Ahupua'a, it does not have any surface dissection upon which water would pass. An Ili is a comparatively smaller land division than an Ahupua'a. The geology of the Ahupua'a of Honouliuli or that portion that makes up the Ewa Plains is an interesting one.

The Ewa Plains, which Kanehili is a part, was formed during the Ice Age when the sea level was at a higher elevation. When the ocean receded it left an emerged coral reef that extended from Waikiki to Waianae. As fresh water passes over or beneath the coral limestone it dissolves the limestone, leaving behind either a surface dissection or caves or a system of karst. In the area of the Ewa Plains or today's Kapolei there are only 2 surface dissections, one is the Honouliuli Gulch and the other is Kalo'i Gulch. In ancient times the water of Kalo'i Gulch reached the ocean as evidenced by this surface dissection on the surface coral limestone. Honouliuli Gulch still has a seasonal stream and a permanent stream in the area of the West Loch Golf Course. The Kalo'i dissection was filled in during the sugar plantation era and discovered with the design of the North-South Road as a second route out of the Kapolei region. There are no surface dissections at the base or exit out of all the remaining gulches or valleys of the southwest portion of the Waianae Mountains. There is no surface dissection west of Kalo'i Gulch to Kahi Point. The water travelled within the porous coral limestone further developing the Ewa Karst and sinkholes.

In Malden's Map of 1825 he identifies several water features or large sinkholes filled in with water. One of these large water features was just makai of Pu'uokapolei and one is identified as the "Spring of Hoakalei" which was a short distance from the ocean at Ku'alaka'i or today known as Nimitz Beach. We know that this was a fresh water spring from both the oral traditions in the "Travels of Pele and Hi'iaka" and a conversation I had with Kupuna Sara Kauka in a previous essay. Today's Ordy Pond which is a short distance from White Plains Beach was also identified by Malden as a water feature. All of this is further supported by the "Travels of Kane and Kanaloa" where Kane brought forth water from the sinkholes at Kanehili with the strike of his ko'oko'o (cane).



25

From: Michael Kumukavoha Lee
91-1200 KEAUNUI DR. Unit 614
Ewa Beach, Hawaii 96706

March 11, 2010

Aloha Ewa Beach Neighborhood Board;

My name is Michael Kumukavoha LEE. I have lived in the Ewa Moku for 15 yrs now. I am Requesting the Ewa Beach neighborhood board to draft two letters to Haseko (Ewa) Inc, and the HOA KALEI Foundation to work with OHA to have cultural monitors to protect our Hawaiian Ali'i Iwi Kupuna at the Ewa Marina Entrance Channel construction Site.

The general public are not aware that a Ali'i Iwi Kupuna was UNCOVERED at the HOA KALEI Ewa Marina Entrance Channel site by a homeless person in January 2001.

We, with OHA, are negotiating a proposed M.O.A to build a burial monument for our Ali'i Iwi Kupuna. Our wealth is our Iwi Kupuna o ka Aina and to take care of them in dignity and with respect,

(27) Mike

We need your help to protect our Iwi due to the fact that Haseko (Ewa) Inc has the needed permits to start construction on the Ewa Marina Entrance Channel.

There are two underground burial caves in this area that are Hehu (A protective under ground shield in times of war).

I request the two letters be drafted one to SHARENE TAM Liaison with HOAKALEI FOUNDATION 91-100 KAIMALIE STREET Suite 205; EWA BEACH HAWAII 96706-6250. Also to Ms. YVONNE IZO of Monitana Lau and Fong LLP 400 Davis Pacific Center; 841 Bishop Street; Honolulu Hawaii 96813 to work on placing full time cultural monitors at the Ewa Marina Entrance Channel Site. I can show the monitors where the Burial caves are.

Aloha Heakua,

Michael Humukawoha Lee

All water for Akupu was brought up from the Akupu Spring, which was carved out of the solid rock below the ridge, a distance of over a mile from camp.

von Holt, Ida Elizabeth Knudsen
Stories of Long Ago, p 120
(Honolulu 1953)

Ewa Coral Plains

Site 146. Ewa coral plains, throughout which are remains of many sites. The great extent of old stone walls, particularly near the Puuloa Salt Works, belongs to the ranching period of about 75 years ago. It is probable that the holes and pits in the coral were formerly used by the Hawaiians. Frequently the soil on the floor of larger pits was used for cultivation, and even today one comes upon bananas and Hawaiian sugar cane still growing in them. They afford shelter and protection, but I doubt if previous to the time of Cook there was ever a large population here.

Vancouver anchored off the entrance to West Loch in 1793 and made the following observations:

The part of the island opposite to us was low, or rather only moderately elevated, forming a level country between the mountains that compose the east (Koolau) and west (Waianae) ends of the island. This tract of land was of some extent but did not seem to be populous, nor to possess any great degree of natural fertility; although we were told that, at a little distance from the sea, the soil is rich, and all the necessities of life are abundantly produced.

Mr. Whitbey observed, that the soil in the neighborhood of the harbour appeared of a loose sandy nature; the country low for some distance, and, from the number of houses within the harbour it should seem to be very populous; but the very few inhabitants who made their appearance were an indication of the contrary.

McAllister, Arch. of Oahu

Legend of Namakaokapao

Namakaokapao was a very strong little boy.

His father was Kauluakahai, a godlike man and his mother was Pokai. They met in Hoaeae and after Namakaokapao was conceived the father returned to his cloud land.

Pualii who came from Lihue to fish at Honouliuli saw Pokai and made her his wife. They went back to his home at Kula-o-keahumoa where they resided.

"Pualii had two large potato patches which remain to this day; they are called Namakaokapao (eyes of the pao - a small fish)."

Pualii went down to get fish one day so that he could eat it with his first harvest of potatoes but the boy Namakaokapao dug up the whole field while he was gone and was roasting some when Pualii returned.

Angered, Pualii went out to find the boy and when he found him threatened to kill him with his ax. When he struck at the boy the blow was diverted as the boy gave a death chant against Pualii and instead the blade was turned against Pualii, cutting off his head.

Namakaokapao picked up the head and threw it towards Waipouli, a cave situated on the beach at Honouliuli.

The king of Oahu, Amau heard this and sent a force to kill the boy for he feared him and his strength. The boy overcame Amau's soldiers so the king himself got ready a large fleet of canoes and sailed to Ewa. There Namakaokapao met him and killed the whole force including the king.

He then brought his mother from the cave Waipouli where she had been hiding and made her the ruler of Oahu.

Fornander
Coll Haw'n Ant
Vol V, part II, p 274

Pohakea

Between Ewa and Waianae; one of the resting places of Lohiau and Hiiaka on their journey from Kauai to meet Pele.

Fornander, Coll Haw'n Ant
Vol V, Part I, p 188, note #6

Legend of Kahalaopuna

(Synopsis) Kahalaopuna was a young and beautiful virgin who lived in Manoa with her parents. She was betrothed to Kauhi a man of note who was from Koolau. Kauhi sent her many gifts on their engagement but unfortunately some people who wished to do harm to Kahalaopuna told Kauhi that his intended wife was dancing every night and sleeping with various lovers.

Enraged, Kauhi set out to kill the girl. He went to her home and asked her to go with him on a

29

Vol. 2

572

F 77

Mei

V. 2

Proof of my families ancient
cultural practice in this
area. MLL.

Ballantine Press
BALANTINE, HANSON AND CO.
EDINBURGH AND LONDON.

My 8th Great Grand Father

Kuali'i of Picking him in Kane
Huli Eua in 1618 AD in his
Chert. Oahu Island burial.

Council April 14, 2010 Recognized
my genealogy to Kuali'i as
Grand Father to Mahekihiwiahua
my 8th Great Grand Father.

Richard Brownlander Jr.
8th Great Grandson of Kuali'i

AN ACCOUNT

OF

THE POLYNESIAN RACE

ITS ORIGIN AND MIGRATIONS

AND THE

ANCIENT HISTORY OF THE HAWAIIAN PEOPLE
TO THE TIMES OF KAMEHAMEHA I.

BY

ABRAHAM FORBANDER,
CIRCUIT JUDGE OF THE ISLAND OF MAUI, &c.
KNIGHT COMPANION OF THE ROYAL ORDER OF KALAKAUA.

VOL. II.

LONDON:
TURNER & CO., LUDGATE HILL.

1880.
[All rights reserved.]

Sep 20,
2010

(30)

With the flower of the Kuku grass,
Falling hither, falling thither.

Not like these (is) Ku.

490

Not like the Naulu (shower),
The rain that brings the land breeze,
Like a water-bowl that has been poured out,
The land breezes of Kunomoku,
The land breezes coming round to Lelewi.
Truly, have you not known

OAHU 495

The mountain breezes, that double your back up,
(That make you) sit crooked and cramped, the Kaimohala,
The Kanehili at Kaupae?

Not like these (is) Ku.

500

Not like the Lipa seaweed,
(Or) the Nanne weed, food for fishes,
(Or) the Lipahapaha weed from Waimea,
(Or) the weed that clings to the trees,
(Or) the red crab on the top of Kaala.

Not like these (is) Ku.

505

Not like the Kukui tree,
The Kukui with the tough bark,
Bark that is cracking in the sun,
Like (the skin of) a man drinking awa;
The scaly (barked) Kukui trees of Iihue.

Not like these (is) Ku.

510

Not like the Adii tree,
(Or) the Poholua, sweet-scented tree,
(Or) the Maile, causing one to pant on Maui,
(Or) the flowering Kalihua from Kawiwi.

Not like these (is) Ku.

515

Not like the Kokio tree,
With the many branches and wilted flowers,
Dropping the flowers on the ground.

Not like these (is) Ku.

520

Not like the Kawan tree,
(Or) the Kalia (which), placed in the mouth,
Consumes into morsels the people,
The island, the district, the land.

Not like these (is) Ku.

525

Not like the porpoise
With his nose that spouts up the sea,
While his body is in the sea, (and) the shark.

Not like these (is) Ku.

530

Not like one with the asthma,
The wheezing (bird) that eats the Ielua blossoms;

The Oo, bird of Kaiona.

Not like these (is) Ku.

535

(Or) the tattered sugar-cane leaves of the gods,
(Or) the breadfruit tree planted by Kethai;
Truly, have you not known
The woman with the faded garment
On top of Punoakapola?

Not like these (is) Ku.

540

Not like the Wiliwili tree,
Of whose fruit bracelets are made,
Whose trunk is gliding away,
Whose body is in the sea of the rollers surf-riding.

Not like these (is) Ku.

545

Not like the blast of the wind
Mourning over the hill-tops,
Causing to be tied down the houses in Koolau,
Fastened down lest they fall by the wind;
The tricky hook of the fisherman,
The fish-hook of Manakalani.

Not like these (is) Ku.

550

Not like the Mamaki shrub,
With its long tangling shoots in the forests,
The choicest buds of all shrubs;
With its fine mesh-like covering
Like spray of the surf on the breast of Kuenu,
On the sacred road, on the long road,
On the long road that must be travelled (by all).

Not like these (is) Ku.

555

Not like the leaves of the Ti plant,
(Or) the leaves of the Wiliwili in Nuanu,
Which with in the rain and the wind
And fall off.
The Wiliwili leaves on the top of Waahila.

Not like these (is) Ku.

560

Not like the rain of Waahila,
(And) the cold wind of Kahaloa,
Scattering the Kou blossoms
That have been strung and fastened up,
And worn as wreaths on the sea of Kapua.

Not like these (is) Ku.

565

Not like the Kamanirua tree,
The bright catcher of birds,
(Or) like the garlands of Hala nites,
(Or) like the blossoms of the Kaa vine,

Not like these (is) Ku.

570

Not like the Kamanirua tree,
The bright catcher of birds,
(Or) like the garlands of Hala nites,
(Or) like the blossoms of the Kaa vine,

575

Ms. Laura Thielen, Chairperson,
and Members of the Board of Land and Natural Resources
January 15, 2009
Page 2

petition for contested case had elapsed, the Board allowed Mr. Lee to file an amended petition, which he did on December 18, 2008.

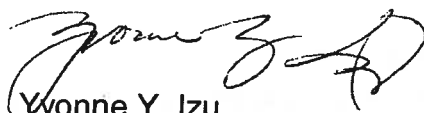
Haseko is confident that Mr. Lee's objections to a reduced-size marina are without merit. In these difficult economic times, however, Haseko believes that going through yet another contested case (or, alternatively, defending a denial of standing on ~~an~~ appeal to the courts) is not the most productive use of either Haseko's or the department's resources. Haseko, therefore, withdraws its request to reduce the size of the marina to 53.76 acres and, instead, will, at least for the time being, retain its permit for the 70-acre marina, which was granted by the Board in 2001.

Haseko will take this opportunity to reconsider whether the public benefits it envisioned with a smaller wetted area and larger open space land area outweighs the costs of having to endure another round of litigation. Additionally, we will explore the possibility of utilizing the Hoakalei Marina as a ferry terminal, as requested by some government officials. Depending on the outcome of the reconsideration of its land plans, Haseko may, at a later time, renew this request for a 53.76-acre marina, or for a marina of a different size. Alternatively, Haseko may continue to excavate a 70-acre marina.

As an administrative matter, it is Haseko's understanding that Mr. Lee's request for a contested case referred only to the change in size of the marina, and that the amendments to Conditions #11 (recordation of CDUP), #22 (updating language regarding regional drainage), and #26 (providing quarterly reports to SHPD and OHA on compliance with the archaeological MOA) that were approved by the Board on February 22, 2008 were not also subject to Mr. Lee's request for a contested case. On that basis, may we assume that the amended Conditions #11, #22, and #26 remain in effect?

Haseko appreciates the time that the Board and OCCL devoted to consideration of the request to reduce the size of the marina and regrets that circumstances have resulted in this outcome. We will keep the Board apprised of the status of the Hoakalei Marina. Please do not hesitate to contact me if you have any questions or comments.

Very truly yours,



Yvonne Y. Izu
Attorney for Haseko (Ewa), Inc.

Cc: Haseko
Michael Lee

32

**‘EWA BEACH COMMUNITY ASSOCIATION MEETING
SEPTEMBER 2, 2010**

7 PM

‘EWA BEACH COMMUNITY LIBRARY

- I. Call To Order**
- II. Introductions**
- III. Minutes of last meeting, 8-19-2010**
- IV. Treasury Report**
- V. Old Business -**
 - 1. “Follow the Money”- Letter dated August 24, 2010 to Mr. Hugh Jones, Asst. State Atty General, Requesting Investigation of the ‘Ewa Beach Community Association (EBCA) Board members for possible improper handling and disbursement of Association Funds (Attached).
 - 2. EBCA - Operating Funds / Fundraising
 - 3. Open new Bank Account
 - 4. Revisions / Up-dates to EBCA by-laws
 - 5. Mailing address - EBCA P.O. Box 2399 ‘Ewa Beach 96706
 - 6. EBCA letterhead / logo
- VI. New Business -**
 - 1. “Welcome” to ‘Ewa Beach sign
 - 2. Political Candidates forum Night
- VII. Committee Report(s)**
 - 1. Government / Community Affairs
 - A. Longs Drug Store - ‘Ewa Beach
 - B. Haseko’s Laulani Shopping Center
 - 2. Others
- VIII. Presentation -**
 - One’ula / Hau Bush Beach Park - Sacred Burial Site of Hawai’i’s Kings and Queens - Mike Lee
- IX. Next Meeting**
- X. Adjournment**

Kai Markell

From: Pua.Aiu@hawaii.gov
Sent: Wednesday, June 03, 2009 4:12 PM
To: Kai Markell
Cc: Jerome K. Yasuhara; Nancy.A.McMahon@hawaii.gov
Subject: Re: Oneula iwi kupuna...

I have time during the week of June 15. Tuesday at 2:00 would probably be best if you want to meet in town. If not Monday or Thursday look okay. However, I just talk to Mike Lee and we may not have to meet. I don't see any problems with what he wants to do as long as he has landowner agreement. We would just need a burial treatment plan. I also suggested that you take him to see some of the other burials around town so he can get some idea of what he might want to do.

Pua

"Kai Markell" <kaim@oha.org>

To <Pua.Aiu@hawaii.gov>

cc <Nancy.A.McMahon@hawaii.gov>, "Jerome K. Yasuhara" <jeromev@oha.org>

06/01/2009 10:06 AM

Subject Oneula iwi kupuna...

Aloha Pua!

One of our beneficiaries, Mike Lee, would like to arrange a meeting with SHPD staff regarding the status and disposition of an ali'i burial site found at Oneula Beach Park in 2001. We have some other beneficiaries who have also expressed interest and OHA remains keenly concerned as well. I anticipate that the meeting could be held out at your office with Jerome, Mike and myself. Just checking on your availability over the next couple of weeks. Mahalo! kai

Kai Markell
Director
Native Rights, Land and Culture
Office of Hawaiian Affairs
711 Kapi'olani Blvd. Suite 500
Honolulu, Hawai'i 96813
(808) 594-1945
kaim@oha.org

(34)

2. I am a Papakilohökö and a Native Hawaiian practitioner of limu medicine and a practitioner of the Hä;
 3. My knowledge of limu was taught to me by my grandfather, Kino Guerrero and Uncle Walter Kamana;
 4. My knowledge of Hä comes from Aunty Alice Holokai;
 5. I possess knowledge of the kaona of the 2102 lines of the Kumulipo;
 6. I am compelled to come forward at this time to reveal certain facts regarding significant Native Hawaiian cultural sites due to the threat of imminent harm, alteration, and destruction of these sacred sites;
 7. The complex of sites addressed in this specific declaration are located in 'Ewa on the Island of O'ahu;
 8. These sites are associated with Kalanikupule and his wives;
 9. These sites are associated with Kaumuali'i and Kahekili;
 10. These sites are associated with Captain Henry Barber and the ship Arthur;
 11. These sites are associated with the Battle of Kuki'iahu and Kaeokulani;
 12. These sites are directly associated with the aftermath of the Battle of Nu'uuanu Pali in 1795;
 13. Many of the sites in Figure 1, Project Area and Site Locations, Phased II(a)-Data Recovery: Field Work and Interim Report Archaeological Mitigation Program, Ewa Marina Community Project, PHRI Project 93-1387, by PHRI, Paul H. Rosendahl, Ph.D., Inc. have been identified through traditional Hawaiian cultural practice by myself and my 'ohana;
 14. Some of the sites include burial sites including the burial site of Kaeokulani;
- I declare under penalty of perjury that the foregoing is true and correct.

Kai Markell
Compliance Manager
Office of Hawaiian Affairs
711 Kapi'olani Blvd. Suite 500
Honolulu, Hawai'i 96813
(808) 594-1945
kaim@oha.org



**P L A N N I N G
S O L U T I O N S**

Via FAX 808-692-8020

November 28, 2005

Ms. Melanie Chinen, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawai'i 96707

Attention: Burials Program

Subject: Inadvertent Discovery of Burial Remains on January 5, 2001
Ocean Pointe Project (formerly Ewa Marina Community Project)
Land of Honouliuli, 'Ewa District
Island of O'ahu (TMK: 9-1-012-8, 9, 11-13, 16, 17)

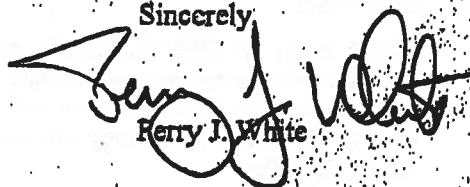
Dear Ms. Chinen:

Planning Solutions is helping HASEKO (Ewa), Inc., with environmental permitting for the proposed Pāpipi Road Drainage Improvements project. At a recent meeting, Mr. Kai Markell of the Office of Hawaiian Affairs mentioned that your office had information concerning a burial found along the shoreline of its Ocean Pointe project in 'Ewa. He thought that all records pertaining to the initial report, disinterment, analysis, and disposition of the inadvertent discovery had been filed in the SHPD-Burials Program offices at Kapolei, and suggested that I contact your Department. Our guess is that the report and related information might be filed under the heading "O'ahu Island/'Ewa District/'Ewa Marina, or One'ula, or Haseko/Inadvertent Discovery/January 5, 2001".

I am writing on behalf of HASEKO to request a copy of all records related to the find so that I can follow up in accordance with Kai's suggestion. I would like to obtain copies of any inadvertent discovery record forms, disinterment reports, inventories of associated artifacts and human skeletal remains, and photographs relating to the inadvertent discovery. My understanding is that the remains were disinterred by SHPD archaeologists in January 2001.

Please call me at 550-4483 if you have any questions and to let me know how we may pay for the reproduction of these records.

Sincerely,



Perry J. White

Cc: Kai Markell, OHA
Raymond Kanna, HASEKO (Ewa), Inc.

36

Table 1.

CHRONOLOGY SUMMARY
Ocean Pointe Project
Land of Honouliuli, 'Ewa District
Island of O'ahu (TMK:9-1-012: various)

<u>Date</u>	<u>Item</u>
2-6/90	Intensive survey and test excavations fieldwork
6/27/91	Intensive survey revised final report (PHRI Report 763-062090; Dunn, Haun and Goodfellow 1991) accepted by SHPO
6/27/91	Mitigation plan (PHRI Report 763-110890; Haun, Rosendahl, and Goodfellow 1991) accepted by SHPD
9/12/92	Inadvertent discovery of human burial/HSR in general area of proposed marina channel; remains removed to CCHONO morgue by HPD on 9/13/92; remains reinterred by Ko Olina Resort staff at approved location on Campbell Estate lands at Puu Palailai Ridge
4/5/93	MOA Items 2.a,b compliance plans (PHRI Report 1262-012693; Maly and Rosendahl 1993a) accepted by SHPO, with conditions regarding site buffers to be revised
6/96	Revised MOA Items 2.a,b compliance plans (PHRI Report 1262-060993; Maly and Rosendahl 1993b) submitted to SHPO
12/93-3/94	Data recovery fieldwork
12/22/95	Data recovery revised final report (PHRI Report 1508-100395; Franklin, Goodfellow and Wulzen 1995) accepted by SHPD
1/19/99	Site preservation plan (PHRI Report 1596-090997; Maly 1997) accepted by USA-CE, with conditions regarding need for signage text revisions acceptable by SHPO
3/16/99	Revised final site preservation plan (PHRI Report 1596-033199; Maly 1999) accepted by SHPO
1/5/01	Inadvertent discovery of human burial/HSR in general area of proposed marina channel; remains removed to SHPD office at Kapolei by SHPD staff on 1/5/01; rest of remains disinterred by SHPD staff on 1/8/01; remains currently curated at SHPD office in Honolulu; final disposition to be determined
2/28/01	Site visit of O'ahu Island Burial Council (OIBC) to 1/5/01 inadvertent discovery location
4/11/01	OIBC meeting; motion made and approved recommending SHPD request property owner to conduct supplemental archaeological inventory survey [i.e., subsurface testing] of shoreline sand dunes
4/26/01	SHPD letter to DPP-CCHONO recommending "supplemental archaeological inventory survey of the shoreline sand deposits...prior to any ground disturbance" in SHPD review of and comment on Draft Supplemental Environmental Assessment (DSEA) prepared in support of requested zoning changes and minor changes to an existing Special Management Area (SMA) Use Permit
11/19/03	PHRI consultation with Dr. Sara L. Collins, SHPD Archaeology Branch Chief and O'ahu Island Archaeologist, regarding scope-of-work appropriate to supplemental archaeological inventory survey recommended by SHPD
1/16/04	Site visit and on-site scoping consultation involving Dr. Paul H. Rosendahl, PHRI Principal Archaeologist, SHPD staff (Dr. Collins, Assistant O'ahu Island Archaeologist Muffet Jourdan, Burials Program Manager Kai Markell, and Burials Program Cultural Specialist Kanai Kapeliela), and client representative Perry J. White of Planning Solutions, Inc.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
555 Kakuhihewa Building
601 Kamokila Boulevard
Kapolei, Hawaii 96707
Tel: (808) 692-8015 • Fax: (808) 692-8020

April 11, 2001

Mr. W.G. Lee
Executive Vice President
Haseko
820 Mililani Street, Suite 820
Honolulu, Hawaii 96813-2938

Dear Mr. Lee:

On February 28, 2001, the O'ahu Island Burial Council (OIBC) visited One'ula Beach to physically reconnoiter the area. The archaeological inventory survey was completed in 1991 and subsequently reviewed and accepted by SHPD. In view of the subsequent burial finds in the shoreline sand deposits (1992 and 2001), we concluded Haseko would be well-advised to revisit its current archaeological survey findings and to perform a supplemental archaeological inventory survey.

The OIBC unanimously voted that Haseko should be so apprised and recommends that the Department of Land and Natural Resources requests Haseko to update its survey of the shoreline sand dunes in order to ensure that important cultural sites are identified and treated properly.

Respectfully yours,

A. Van Horn Diamond, Chair
O'ahu Island Burial Council

cc: Perry White, Planning Solutions
Cecil Santos, DLNR Land Division

File Ewa marina



HASEKO (Ewa). Inc.

JUN 15 2001

June 14, 2001

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
601 Kamokila Boulevard, Room 555
Kapolei, Hawaii 96707

Re: Ocean Pointe Master Plan (Revised);
Draft Supplemental Environmental Assessment

Dear Mr. Hibbard:

The Department of Planning and Permitting has forwarded to us your April 26, 2001 letter commenting on our draft Supplemental Environmental Assessment for the reconfiguration of the Ocean Pointe master plan.

We share your concerns regarding the 1992 and 2001 inadvertent discoveries of burials along the shoreline of Hau Bush Beach. As you have noted, the shoreline sand deposits were previously surveyed as part of the work completed for the Memorandum of Agreement between DLNR, the U.S. Army Corps of Engineers, the Office of Hawaiian Affairs and HASEKO. As you know, the Ocean Pointe project is currently subject to a number of federal, state and county permit conditions that require us to work closely with SHPD and to cooperate in the review and approval of mitigation measures in the event that previously unidentified archaeological resources are found during Ocean Pointe's development.

HASEKO is committed to insuring that all archaeological resources at the Ocean Pointe site are handled properly. We have no objection to preparing a supplemental archaeological inventory survey of the shoreline sand deposits in the area of the Ocean Pointe marina's entrance channel prior to any disturbance of the ground in that area.

Your letter, along with this response, will be reproduced in the forthcoming Final

39

Mr. Don Hibbard
June 14, 2001
Page 2

Supplemental Environmental Assessment. If you have any further questions or comments, please feel free to call me at 536-3771, ext. 225.

Very Truly Yours,

HASEKO (EWA), Inc.



Nelson W. G. Lee
Executive Vice President

cc: Mr. Randall K. Fujiki, Department of Planning and Permitting
Ms. Ardis Shaw-Kim, Department of Planning and Permitting
Mr. A. Van Horn Diamond, O'ahu Island Burial Council
Mr. Kai Markell, Burial Sites Program
Mr. Farley Watanabe, Department of the Army Corps of Engineers
Mr. Perry White, Planning Solutions
Oshima Chun Fong and Chung, LLP

F:\DOCUMENT\HK-Ewa\Land Use\Ltr SHPD(05-01).doc



REPLY TO
ATTENTION OF

**DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440**



**DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440**

MEMORANDUM OF AGREEMENT

AMONG THE U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT, THE HAWAII STATE HISTORIC PRESERVATION OFFICER AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION PERTAINING TO DEPARTMENT OF THE ARMY (DA) PERMIT APPLICATION NO. PODCO 2117.

WHEREAS, the U.S. Army Corps of Engineers, Honolulu District (Corps) has determined that the issuance of the aforementioned Department of the Army permit to HASEKO (Ewa), Inc. (Haseko) for the construction of the Ewa Marina project in Ewa, Oahu, Hawaii, will have an adverse effect on 21 significant historic properties located within the One'ula Archaeological District, which was determined eligible for inclusion in the National Register of Historic Places; and

WHEREAS, the Corps has consulted with the Hawaii State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (Council) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, Haseko participated in the consultation and has been invited to concur in this memorandum of agreement; and

WHEREAS, the Office of Hawaiian Affairs (OHA) was invited to be a participating party in the consultation and to concur in this memorandum of agreement; and

WHEREAS, the term "permit area," for Section 106 purposes, shall be defined as the area directly impacted by the construction of the marina, as well as upland areas filled, graded or modified with the dredged and excavated material, and other upland areas used for the disposal of undesirable or excess dredged and excavated materials.

NOW THEREFORE, the Corps, SHPO, Haseko, OHA, and the Council agree that should the Corps decide to issue the permit, the permit will be

Memorandum of Agreement, File No. PODCO 2117

issued in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

The Corps will ensure that the following measures are carried out.

1. In order to mitigate the adverse effects of the project on the 21 significant sites, the program outlined in the attached Archaeological Mitigation Plan, Ewa Marina Community Project-Phase I, Mitigation Plan for Data Recovery, Interim Site Preservation, and Monitoring, February 1991, shall be carried out.

2. Prior to the issuance of the DA permit, the applicant shall:

a. Submit to the Corps a plan for the delineation of buffer zones around archaeological sites. This plan shall be in accordance with the Interim Preservation Plan section of the approved Archaeological Mitigation Plan and shall be approved before issuance of the DA permit. It shall be designed to protect all sites requiring (i) data recovery excavations and/or (ii) long-term preservation (protection or interpretive development). This plan shall be submitted and approved prior to commencement of any on-site construction for which Corps approval is required. The review and approval procedures shall be in accordance with Paragraph 2.c., below.

b. Submit to the Corps a plan for consulting with the State of Hawaii Office of Hawaiian Affairs concerning the interpretive language that would be used in any public education programs implemented in fulfillment of conditions of the DA permit. This plan shall be submitted and approved prior to issuance of the DA permit. The review and approval procedures shall be in accordance with Paragraph 2.c., below.

c. Within five (5) working days of receiving the submittals required by these conditions, the Corps shall forward copies to the SHPO and the Council. SHPO and Council shall review the plans and provide their written comments to the Corps within thirty (30) calendar days. Within forty-five (45) calendar days of initial receipt of the above-referenced submittals, the Corps shall notify the permittee of its approval or of any deficiencies and the measures needed to eliminate

Memorandum of Agreement, File No. PODCO 2117

these. If any additional information is requested from the permittee, the Corps shall, in consultation with the agency making the request, determine the adequacy of any additional information that is provided within fifteen (15) calendar days of its receipt.

3. The permittee shall submit a Detailed Site Preservation Plan to the Corps which shall be in accordance with the four-phased mitigation program outlined in the approved Archaeological Mitigation Plan. The detailed Site Preservation Plan shall be prepared upon completion of mitigation (data recovery) excavations and shall provide detailed descriptions of the measures relating to preservation and interpretive development (including signage, landscaping, maintenance, and protection from vandalism). The permittee shall submit this plan within three (3) months of completion of data recovery. The review and approval procedures shall be in accordance with Paragraph 2.c., above.

4. Should a dispute arise during the course of this agreement, the Corps shall consult with the SHPO to resolve the objection. If the Corps determines that the objection cannot be resolved, the Corps shall request further comments from the Council pursuant to 36 CFR 800.6(b). Any Council comment provided in response to such a request will be taken into account by the Corps in accordance with 36 CFR 800.6(c)(2) with reference only to the subject of the dispute. The Corps responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

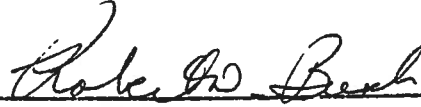
5. Failure to carry out the terms of this agreement requires that the Corps again request the Council's comments in accordance with 36 CFR Part 800. If the Corps cannot carry out the terms of this agreement, it will not take or sanction any action or make any irreversible commitment that would foreclose the Council's consideration of modifications or alternatives to the undertaking.

6. If the signatories to this agreement believe that the terms of the agreement cannot be carried out, or that an amendment must be made, that party shall notify the other signatories and request consultation to amend the agreement. The process of amending the agreement shall be the same as that exercised in creating the original agreement.

7. This Memorandum of Agreement may be executed in counterparts.

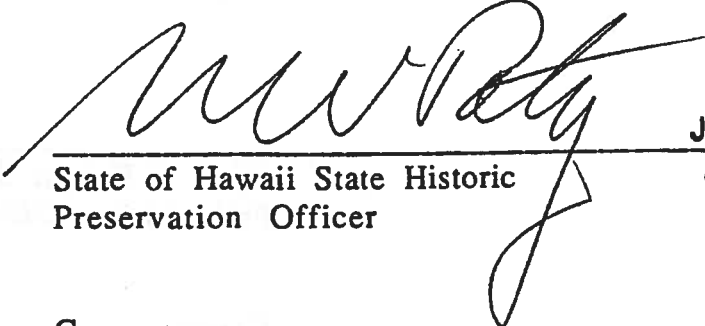
Memorandum of Agreement, File No. PODCO 2117

Execution of this Memorandum of Agreement and implementation of its terms show evidence that the Corps has afforded the Council a reasonable opportunity to comment on the undertaking and its effects on historic properties and that the Corps has taken into account the effect of its undertaking on historic properties.

 10/13/92

Executive Director (Date)
Advisory Council on Historic Preservation

District Engineer (Date)
U. S. Army Corps of Engineers
Honolulu District

 JUL 27 1992

State of Hawaii State Historic Preservation Officer (Date)

Concur:

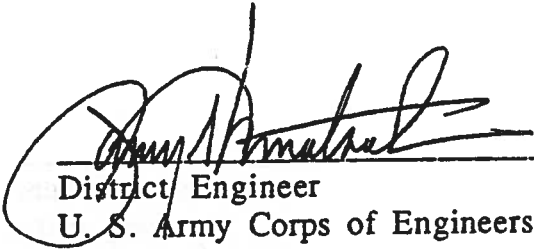
Title: (Date)
Office of Hawaiian Affairs

Title: (Date)
HASEKO (Ewa), Inc.

Memorandum of Agreement, File No. PODCO 2117

Execution of this Memorandum of Agreement and implementation of its terms show evidence that the Corps has afforded the Council a reasonable opportunity to comment on the undertaking and its effects on historic properties and that the Corps has taken into account the effect of its undertaking on historic properties.

Executive Director (Date)
Advisory Council on Historic Preservation



District Engineer
U. S. Army Corps of Engineers
Honolulu District

4 Sep 92

(Date)

State of Hawaii State Historic (Date)
Preservation Officer


Concur:

Title: (Date)
Office of Hawaiian Affairs

Title: (Date)
HASEKO (Ewa), Inc.

Memorandum of Agreement, File No. PODCO 2117

Execution of this Memorandum of Agreement and implementation of its terms show evidence that the Corps has afforded the Council a reasonable opportunity to comment on the undertaking and its effects on historic properties and that the Corps has taken into account the effect of its undertaking on historic properties.




Executive Director (Date)
Advisory Council on Historic Preservation

District Engineer (Date)
U. S. Army Corps of Engineers
Honolulu District

State of Hawaii State Historic (Date)
Preservation Officer

Concur:

Title: (Date)
Office of Hawaiian Affairs



Katsuo Shimizu June 30, 1992
Title: President (Date)
HASEKO (Ewa), Inc.

Memorandum of Agreement, File No. PODCO 2117

Execution of this Memorandum of Agreement and implementation of its terms show evidence that the Corps has afforded the Council a reasonable opportunity to comment on the undertaking and its effects on historic properties and that the Corps has taken into account the effect of its undertaking on historic properties.

Executive Director (Date)
Advisory Council on Historic Preservation

District Engineer (Date)
U. S. Army Corps of Engineers
Honolulu District

State of Hawaii State Historic (Date)
Preservation Officer

Concur:

 2/19/93

Title: (Date)
Office of Hawaiian Affairs

Title: (Date)
HASEKO (Ewa), Inc.

MORIHARA LAU & FONG LLP

A LIMITED LIABILITY LAW PARTNERSHIP

March 23, 2009

Michael Kumukauoha Lee
91-1200 Keaunui Drive, 814
Ewa, Hawaii 96706

Dear Mike:

On February 13, 2009, outside of the Board Room and after leaving the Land Board meeting, you indicated to me several matters that you wanted Haseko to consider. (Kai Markell, Jerome Yasuhara and Linda Chow were also in attendance.) As I recall you stated that if you could reach agreement with Haseko on these matters, you would agree not to contest any future effort by Haseko to modify the size of the marina.

Following our discussion, I mentioned to Haseko the fact that we had this conversation, but did not go into any of the particulars. At the time Haseko indicated an interest in following up your requests. I have to admit that subsequently I dropped the ball and failed to even relay to Haseko the particulars of our discussion. Recently, Haseko reminded me of this outstanding matter.

Given the time that has elapsed since our discussion and the fact that the notes I took are sketchy, I wanted to confirm with you my recollection and understanding of what you are asking for before I relay your message to Haseko and Haseko begins internal deliberations on your requests. My recollection is as follows:

- (1) You want the iwi that was discovered in 2001 at the shoreline adjacent to Ocean Pointe to be reinterred within the Ocean Pointe/Hoakalei project site. Your desire is to take the iwi out of the State Historic Preservation Division's storage, placed into a metal box, and reinterred in a safe area with a plaque identifying the remains.
- (2) You want Haseko to set aside a place within the Ocean Pointe/Hoakalei project site for reburial of any iwi that are discovered during construction of the Ocean Pointe/Hoakalei development.
- (3) You asked that a replacement pond be constructed for the anchialine pool that will be destroyed due to the construction of the marina. You indicated that Dr. Sam Gon had collected some opae`ula from the Ocean Pointe anchialine pool and would like to be able to return them to the replacement pool.

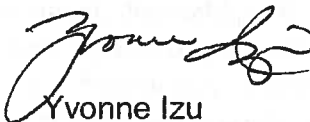
Michael Kumukauoha Lee
March 23, 2009
Page 2

- (4) You want to have input on what happens with the preservation site within the Kauhale Preserve that had been damaged (Site No. 3205); specifically, you do not want to see any structure built there.

I would appreciate your confirming my recollection of our conversation or correcting any of my misunderstandings. When I receive your response, I will immediately relay your requests to Haseko.

I apologize for not giving this matter the prompt attention it deserves.

Very truly yours,



Yvonne Izu

Cc: Kai Markell
Jerome Yasuhara
Linda Chow

48

MORIHARA LAU & FONG LLP

A LIMITED LIABILITY LAW PARTNERSHIP

March 23, 2009

Michael Kumukauoha Lee
91-1200 Keaunui Drive, 814
Ewa, Hawaii 96706

Dear Mike:

On February 13, 2009, outside of the Board Room and after leaving the Land Board meeting, you indicated to me several matters that you wanted Haseko to consider. (Kai Markell, Jerome Yasuhara and Linda Chow were also in attendance.) As I recall you stated that if you could reach agreement with Haseko on these matters, you would agree not to contest any future effort by Haseko to modify the size of the marina.

Following our discussion, I mentioned to Haseko the fact that we had this conversation, but did not go into any of the particulars. At the time Haseko indicated an interest in following up your requests. I have to admit that subsequently I dropped the ball and failed to even relay to Haseko the particulars of our discussion. Recently, Haseko reminded me of this outstanding matter.

Given the time that has elapsed since our discussion and the fact that the notes I took are sketchy, I wanted to confirm with you my recollection and understanding of what you are asking for before I relay your message to Haseko and Haseko begins internal deliberations on your requests. My recollection is as follows:

- (1) You want the iwi that was discovered in 2001 at the shoreline adjacent to Ocean Pointe to be reinterred within the Ocean Pointe/Hoakalei project site. Your desire is to take the iwi out of the State Historic Preservation Division's storage, placed into a metal box, and reinterred in a safe area with a plaque identifying the remains.
- (2) You want Haseko to set aside a place within the Ocean Pointe/Hoakalei project site for reburial of any iwi that are discovered during construction of the Ocean Pointe/Hoakalei development.
- (3) You asked that a replacement pond be constructed for the anchialine pool that will be destroyed due to the construction of the marina. You indicated that Dr. Sam Gon had collected some opae'ula from the Ocean Pointe anchialine pool and would like to be able to return them to the replacement pool.

49

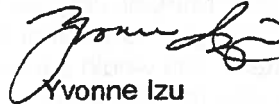
Michael Kumukauoha Lee
March 23, 2009
Page 2

- (4) You want to have input on what happens with the preservation site within the Kauhale Preserve that had been damaged (Site No. 3205); specifically, you do not want to see any structure built there.

I would appreciate your confirming my recollection of our conversation or correcting any of my misunderstandings. When I receive your response, I will immediately relay your requests to Haseko.

I apologize for not giving this matter the prompt attention it deserves.

Very truly yours,



Yvonne Izu

Cc: Kai Markell
Jerome Yasuhara
Linda Chow

50

MORIHARA LAU & FONG LLP
A LIMITED LIABILITY LAW PARTNERSHIP

July 13, 2009

Michael Kumukauoha Lee
91-1200 Keaunui Drive, 614
Ewa, Hawaii 96706

Dear Mike:

The purpose of this letter is to follow up on the meeting held on May 20, 2009, with you, Kai Markell, Jerome Yasuhara, Dana Viola and myself. During the meeting, which was arranged at your request, you identified four matters on which you sought the cooperation of my client, Haseko (Ewa), Inc. I had promised to get back to you on two things: (1) Haseko's response on whether it was willing to continue to be involved in discussions relating to the reinterment of the iwi recovered from the shoreline near Ocean Pointe, and (2) a report on the replacement anchialine pools. By this letter, I also hope to confirm our mutual understanding of the matters discussed. If you find that I am not correctly reporting on the May 20 meeting, or subsequent conversations we have had, please let me know.

Reinterment of iwi recovered from shoreline near Haseko's property. At the May 20 meeting, you stated that you are interested in a proper reburial of the iwi in a location close to where it was discovered. A proper reburial, in your view, included placement within an aluminum box which would be covered with concrete and rocks. The reburial site would be identified with a plaque and surrounded by a fence.

We had agreed at the May 20 meeting that you would be obtaining approvals from all necessary agencies to effect the reinterment, including, but not limited to, the State Historic Preservation Division (SHPD), Oahu Burial Council, and OHA.

In a subsequent telephone conversation, you told me that Pua Aiu, Administrator of SHPD, suggested that reinterment in a crypt and a hedge of native plants would be preferable. You also indicated an assumption that the crypt would be located on Ocean Pointe property. Additionally, in a very recent conversation you and I had, you indicated that the iwi is now in the OHA's possession.

Prior to the conclusion of our May 20 meeting, you made it clear that all you were asking of Haseko at that time was to keep the lines of communication open on this matter. I specifically asked whether Haseko's willingness or ability to provide a location within Ocean Pointe for the reinterment was a condition for continuing to

dialogue, your response was that it was not. You indicated that there may be alternative ways for Haseko to participate in facilitating the reinterment. Haseko asked me to relay to you its willingness to continue the dialogue on this matter; that willingness, however, was based on the clear understanding that it is not making any commitments at this time, including, and especially with respect to, reinterring the iwi on Ocean Pointe property.

Replacement Anchialine Pool. You expressed an interest in Haseko constructing a replacement anchialine pool for the one that will be destroyed with the excavation of the marina entrance channel. As I mentioned at our May 20 meeting, Haseko has created such replacement pools pursuant to the permit issued by the U.S. Army Corps of Engineers for the marina.

Over the years, Haseko has excavated a number of replacement pools at various locations. The replacement pools near the shoreline have experienced numerous problems with vandalism and have been dump sites for all kinds of trash, including used diapers, motor oil, fishing nets, food stuff, boulders, and even a car and a dead shark. In 2000, the State Department of Health discovered a release of a possibly hazardous substance in one of the pools. Because of these problems, Haseko closed the pools near the shoreline and constructed others that are more inland and less accessible to the public.

At least annually, Haseko reports to the Corps of Engineers on the status of the replacement pools. Representatives of the DLNR's Division of Aquatic Resources have also conducted some monitoring activities at the replacement pools.

Rebuilding the "Shrine." You mentioned at the May 20 meeting that you would like to take photographs of an archaeological feature on Ocean Pointe property that was damaged. The purpose is to have some people on the Big Island, who are knowledgeable about the rebuilding of shrines, view the photos and provide advice on its rebuilding.

There is some confusion about which archaeological feature you are referring to inasmuch as there were two sites that were inadvertently damaged, neither of which is a shrine. Of the two, I presume you are interested in Site 3205. (The other damaged site constituted a bulldozer push pile of World War II vintage.)

As I indicated at our May 20 meeting, Haseko is holding a Cultural Resources Planning Workshop. By now, you must have received an invitation to this July 31 event. Should you elect to participate in this workshop, you will be allowed to photograph Site 3205, which is in the tour of the Kauhale Preserve. Please understand that this permission to take photographs in no way indicates Haseko's concurrence with your purpose.

52

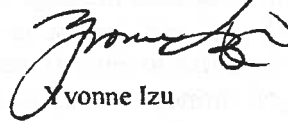
Michael Kumukauoha Lee
July 13, 2009
Page 3

Cultural Resource Base to Advise Haseko. You suggested that Haseko establish a community resource base or advisory board to provide Haseko with information or advice on various cultural matters, such as limu. In your opinion, the input Haseko receives from the Hoakalei Cultural Foundation represents viewpoints that are too limited.

The July 31, 2009 Cultural Resources Planning Workshop appears to precisely address your concerns in this regard. Haseko certainly hopes that you will attend this workshop.

Again, if you believe I misunderstood or am misstating anything, please let me know.

Very truly yours,



Yvonne Izu

Cc: OHA (Kai Markell/Jerome Yasuhara)
Haseko

MORIHARA LAU & FONG LLP

A LIMITED LIABILITY LAW PARTNERSHIP

October 20, 2009

Michael Kumukauoha Lee
91-1200 Keaunui Drive, 614
Ewa, Hawaii 96706

Dear Mike:

I am responding to the telephone message you left me on October 14, 2009. Your message indicated that you and your representatives at OHA (I presume you mean Kai Markell and Jerome Yasuhara) would like to enter Haseko's property to view the replacement anchialine pool and the "damaged shrine," which, according to you, was not included in the Cultural Workshop site tour. You indicated in your message that I had previously agreed to such site visits.

First, let me renew my request that you communicate with me in writing. As your telephone message demonstrates, our communications seem to be fraught with misunderstandings. To avoid them, I believe it is best that we put our communications in writing.

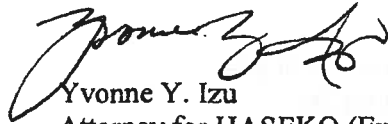
Anchialine Pool. You have never before requested a visit to the anchialine pool. In our prior communications your request was that a replacement anchialine pool be constructed. See my letters to you dated March 23, 2009 and July 13, 2009, which I have attached for your convenience. As I explained in one of our meetings and reiterated in the July 13 letter, such a replacement pool has already been constructed and is being monitored by both the Department of Land and Natural Resources Division of Aquatic Resources ("DAR") and the U.S. Army Corps of Engineers ("COE"). Because of vandalism that has occurred at other anchialine pool replacement sites, which was described in the July 13 letter, Haseko restricts access to the replacement pool to DAR and COE.

"Damaged Shrine." Although you have repeatedly spoken of the "damaged shrine," you have never clarified which archaeological feature you are referring to. As indicated in my July 13 letter, there were two archaeological features within the Ocean Pointe site which were inadvertently damaged, neither of which is, or ever was, a shrine. One is a World War II bulldozer push pile, and the other is Site 3205. The entire group, including you, that toured the Kauhale Preserve during the Cultural Planning Workshop held on July 31, 2009 visited Site 3205.

Michael Kumukauoha Lee
October 20, 2009
Page 2

Based on the foregoing, Haseko will not be arranging for any site visit as you requested in your telephone message. Moreover, given your health problems, which caused you to fall in the Kauhale Preserve during the Cultural Planning Workshop site tour (for which you lodged a claim for compensation with Haseko), Haseko is extremely concerned about having you visit any of the unimproved areas within the project site.

Very truly yours,



Yvonne Y. Izu
Attorney for HASEKO (Ewa), Inc.

Enclosures

cc: Clyde Namuo
Kai Markell/Jerome Yasuhara
HASEKO (Ewa), Inc.

55

ATTACHMENT 2

OFFICE OF THE LIEUTENANT GOVERNOR

STATE OF HAWAII
STATE CAPITOL
P.O. BOX 3226
HONOLULU, HAWAII 96801
PHONE: (808) 586-0255
FAX: (808) 586-0231

JAMES R. AIONA, JR.
LIEUTENANT GOVERNOR

December 21, 2009

Michael K. Lee
91-1200 Keaunui Drive, Unit 614
Ewa Beach, Hawai'i 96706

Re: Cultural Monitors for Ewa Marina

Aloha Michael:

Thank you for your letter to Lieutenant Governor James R. Aiona, Jr., dated December 21, 2009. The Lieutenant Governor enjoyed hearing from you, and wanted me to convey his appreciation for your ongoing efforts to protect and preserve our native burial sites. In your letter, you request that the State Historic Preservation Division (SHPD) place cultural monitors at the proposed Ewa Marina entrance site when construction begins in 2010.

By copy of this letter (along with your correspondence to our office) to Laura Thielen, Chair of the Department of Land and Natural Resources (DLNR) and Dr. Puaalaokalani Aiu, Administrator of SHPD, I am asking that DLNR and SHPD look into your request and take necessary and appropriate action. I am also asking that DLNR and SHPD keep our office apprized of any response or development regarding your request.

Once again, Mr. Lee, thank you for your letter to Lieutenant Governor Aiona. We wish you all the best for a prosperous and healthy 2010.

Aloha ke Akua,



KEVIN A. SOUZA, ESQ.
Chief of Staff

cc: Honorable Lieutenant Governor James R. Aiona, Jr.
Laura Thielen, Chair, Department of Land and Natural Resources (w/enclosure)
Dr. Puaalaokalani Aiu, Administrator, State Historic Preservation Division (w/enclosure)

56

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

LAURA R. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

January 11, 2010

Michael Kumukauoha Lee
1200-Keaunui Drive, Unit 61
'Ewa Beach, Hawaii 96706

Dear Mr. Lee:

SUBJECT: Historic Preservation Concerns for Cultural Monitors at Haskeo 'Ewa Marina Project.

Thank you for your concern regarding Hawai'i's invaluable cultural resources and 'iwi kupuna in the Ewa Beach area.

§6E, Hawaii Revised Statutes, as you noted nor our rules have any jurisdiction for Cultural Monitors. We suggest you contact hoakaleifoundation.org (HCF) or Sharene Tam at Haseko, the liaison with HCF. The permits have been issued but the owners or the community group may be interested in your Cultural Monitor idea. T.S. Dye and Colleagues are the archaeological monitors.

We look forward to working with you and with the community to protect and preserve Hawai'i's cultural resources and 'iwi kupuna. Please do not hesitate to contact me at (808) 692-8015 or at Nancy.A.McMahon@hawaii.gov.

Aloha,

A handwritten signature in cursive script that reads "Nancy A. McMahon".

Nancy McMahon, Archaeology and Historic Preservation Manager
Deputy Administrator
State Historic Preservation Division



**STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813**

January 29, 2010

Yvonne Izu, Esq.
400 Davies Pacific Center
841 Bishop Street
Honolulu, HI 96813

RE: 'Ewa Marina and OHA Beneficiary Request for Assistance, Michael Kumukauoha Lee

Aloha e Ms. Izu,

The Office of Hawaiian Affairs (OHA) is continuing to assist our beneficiary, Mr. Michael Kumukauoha Lee, with his advocacy efforts at One'ula to protect the cultural landscape in light of the ongoing oceanfront development there by Haseko Hawai'i, Inc. and the imminent breach of One'ula beach for the 'Ewa Marina.

There are two issues. First, Mr. Lee reports that he has yet to receive a response regarding his July 21, 2009 letter addressed to you regarding three issues:

1. The proper treatment of the chiefess awaiting reburial which originated from the beach area fronting the proposed 'Ewa Marina;
2. The 'opae 'ula and anchialine pond restoration;
3. Reconstruction of the damaged cultural sites.

Secondly, Mr. Lee has been in contact with the Office of the Lieutenant Governor and the State Historic Preservation Division (SHPD) regarding his request to have cultural monitoring of the imminent breach of the area fronting 'Ewa Marina due to the high possibility that other important ancestral human skeletal remains are present in that specific area. The existing Chiefess and other potential remains are now believed to be associated with O'ahu Paramount Chief Kalanikūpule.

Yvonne Izu
January 29, 2010
Page 2

Towards this end, it was suggested to Mr. Lee by the SHPD that he contact your Hoakalei Cultural Foundation to arrange a meeting to discuss the issue of cultural monitoring on the beach to identify and provide additional level of protection for the precious cultural resources which exist in the area to avoid irreparable harm.

Thank you for your attention to this important and time-sensitive matter. If you have further questions, please contact Kai Markell, Director, Native Rights, Land and Culture by phone at (808) 594-1945 or e-mail him at kaim@oha.org.

'O wau iho nō me ka 'oia 'i'o,



Clyde W. Nāmu'o
Chief Executive Officer

CWN:km

c: State Historic Preservation Division
Office of the Lieutenant Governor

59

Anita Manzano

From: Kai Markell
Sent: Monday, August 23, 2010 1:26 PM
To: Anita Manzano
Subject: FW: Request for Investigation

Can you print two copies for Mike? Mahalo! kai

From: Kai Markell
Sent: Monday, August 23, 2010 1:24 PM
To: 'dlnr@hawaii.gov'; Pua.Aiu@hawaii.gov; 'Phyllis.L.Cayan@hawaii.gov'; 'Patti.L.Edwards@hawaii.gov'
Cc: Jerome K. Yasuhara; Keola Lindsey; Esther P. Kia'aina; Deirdra Alo
Subject: Request for Investigation

Dear DOCARE/SHPD:

OHA has recently received allegations of unauthorized construction and/or surveying work performed nearby Haseko's 'Ewa Marina project having adversely impacted cultural and historic properties (including iwi kūpuna) without any mitigation plan or reporting to proper authorities. We are requesting an investigation into these allegations of non-permitted grubbing, landscaping and stability core sampling on the site of the old Lion's Club property known locally as "Ted Farm's Place" at Papipi Road along near the beach. This work was allegedly performed by STEWART ENGINEERING CO. (ph. 262-3396).

Based on preliminary accounts by OHA beneficiary and 'Ewa lineal descendant MICHAEL KUMUKAUOHA LEE (ph. 683-1954), we understand that 'Ewa Neighborhood Board Chairman ROGER LACUESTA (ph. 689-4100) and fellow member GLENN OMILDA responded to community concerns on these alleged activities, which are believed to have occurred from July 28, 2010, to August 19, 2010, at all hours. This initial investigation resulted in revealing that (1) the work being performed was likely without permit, and (2) human skeletal remains were likely discovered by STEWARD ENGINEERING CO. employees.

On the first issue, we understand that the County DEPARTMENT OF PLANNING & PERMITTING and the HONOLULU POLICE DEPARTMENT was called—please consult HPD Report #10-299-839 written by Officer D. Slattery of the Kapolei Police Station. As to the second issue on human skeletal remains, we are unsure whether or not the discovery was reported to SHPD or HPD pursuant to the state burial laws and regulations.

OHA requests an investigation into these matters in the interest of our shared responsibilities pursuant to Hawai'i Constitution Articles X, XII, Hawai'i Revised Statutes § 6E and Hawai'i Administrative Rules 13-300. Mahalo in advance for your assistance.

60

The City is reviewing plans for a new beach access road that will be built makai of the one you use now. The project includes infrastructure needed for planned park improvements. After this new road is built, Haseko will give the City land to expand One‘ula Beach Park. We’ll let you know when work will begin.

One'ula Beach Park

----- Forwarded message -----

From: **Tajima-Ueki, Sarah** <stajima@honolulu.gov>

Date: Fri, Sep 3, 2010 at 9:38 AM

Subject: FW: Message from REINY SAMSON (8083977898)/Referral of Media Inquiry

To: Samson@thehawaiiindependent.com

Aloha Mr. Samson:

Per your request to Weston Wataru for the above mention subject matter, please find our comments below:

On August 19 and 23, 2010, our office received two separate complaints about excavation work taking place makai of the Oneula Beach Park access road. An investigation by our inspector on August 19, revealed three pits excavated at that location. According to Mr. Dan Wiley of the land owner, Haseko Homes, Inc., the pits were excavated for a geotechnical exploration/drainage study as part of the Papipi Road Drainage Improvement Project. The work was performed by Delta Construction Corporation and Stewart Engineering, Inc. with T.S. Dye & Colleagues, Archaeologists, Inc. also at the site to monitor the excavations. Our inspector was informed by Mr. Kelapala Dye that no evidence of human remains was discovered. Since the work required a grading permit, the inspector stopped the work, and directed Haseko to backfill the pits and obtain the grading permit. The inspector also notified the State Historic Preservation Division about the matter. Follow-up inspections on August 23 and 25 revealed that the pits were backfilled, and the area was being cleared of debris. Our office is presently working with Haseko on the grading permit.

Should you have any further questions, please feel free to contact the Department of Planning and Permitting.

Sarah Tajima-Ueki

Secretary to the Deputy Director

Department of Planning & Permitting

(808) 768-8001

62



July 22, 2010

Mr. Michael Lee
91-1200 Keaunui Drive, Apt. 614
Ewa Beach, HI 96706

Dear Mike,

Thank you for participating in our July 15, 2010 workshop. We appreciate your interest, and that you took time to learn about our preservation plans and Hoakalei Cultural Foundation's vision for the Kauhale Preserve.

As a reminder, please be sure to submit the feedback/comment form along with any additional information you may have about this area. All submissions will be posted to www.kauhale.wordpress.com so that all can participate and see what is being shared.

As you know, protection and preservation of archaeological features within our property has always been important to us. We want to be as proactive as possible in these efforts. We therefore hope that you will share detailed information about specific sites that will help us meet this mission.

Later this year, we hope to be able to bring water to the mauka portion of Kauhale Preserve, which will allow the Foundation and community to begin actively caring for the area. We look forward to continuing to work together to implement the Kauhale Preserve preservation plan and to help the larger community learn more about this treasure in our midst.

In the meantime, please mark your calendar for Saturday November 6, 2010, when Hoakalei Cultural Foundation will sponsor a mini landscaping workshop and planting kit giveaway in honor of Arbor Day. Pre-registration will be required for the hour-long sessions. More information will be posted on the foundation's website this fall: www.hoakaleifoundation.org.

We look forward to seeing you there!

Mahalo,

Nancy Maeda
Executive Vice President



HASEKO (Ewa), Inc.

June 17, 2010

Mr. Michael Lee
91-1200 Keaunui Drive, Apt. 614
'Ewa Beach, HI 96706

Dear Mr. Lee,

The Hoakalei Cultural Foundation has asked for our assistance in organizing another Cultural Resource Planning Workshop on Thursday, July 15, 2010 at 9:00 a.m. As you may recall, Haseko held the first workshop last year as part of our commitment to help preserve archaeological features within the Ocean Pointe and Hoakalei communities.

The workshop is scheduled for:

Date: Thursday July 15, 2010
Time: 9:00 a.m.
Place: Ocean Pointe Community Center
Address: 91-6545 Kapolei Parkway (cross street is Kaileole'a Drive) in 'Ewa Beach

Since you have expressed to the 'Ewa Neighborhood Board knowledge about sites specifically within the mauka end of the Kauhale Preserve, this workshop will include another site visit there, and potentially elsewhere on our property as needed.

Please wear comfortable footwear as walking on uneven terrain may be involved. Following the site visit, we will return to the community center for lunch and to discuss next steps.

The community center has 22 regular parking spaces, and two handicapped spaces. Street parking will also be available on the makai side of Kaileole'a Drive.

We sincerely hope you will join us. To reserve your space at the Workshop, please call Ann Lee at 689-7772 ext. 229 or email her at aylee@haseko.com before July 7, 2010.

Mahalo,

Nancy Maeda
Executive Vice President

Enclosure: Site Waiver Form (please bring a signed copy to the workshop)

(64)



HASEKO (Ewa), Inc.

June 29, 2009

Mr. Michael Lee
91-1200 Keaunui Drive, Apt. 614
Ewa Beach, HI 96706

Dear Mr. Lee,

As part of our commitment to help preserve archaeological features within the Ocean Pointe and Hoakalei communities, Haseko is sponsoring a Cultural Resources Planning Workshop on Friday, July 31, 2009 at 9:00 a.m. to develop interpretive signage for our three designated preservation areas. As someone who is interested in cultural and/or community matters, we hope you will agree to participate.

When Haseko first acquired the property in 1988, we commissioned archaeologists to conduct extensive archaeological data recovery field work throughout the entire Ocean Pointe/Hoakalei project site. Despite more than a century of sugar cultivation, archaeologists found a number of pre-historic and historic features. The archaeological data and historical documentary research showed this area was not a permanent settlement, but instead served as a kind of temporary camp for people to stay at while visiting the area to utilize the ocean's resources. Over time, some of the visitor camps acquired almost permanent status, with certain camps being consistently used for short periods of time. Eventually, use of the camps increased, with some used year-round, but not necessarily by the same people. There is no evidence that people made their primary home within the project site at any time.

After consulting with archaeologists, the U.S. Army Corps of Engineers, the National Advisory Council on Historic Preservation, the State Historic Preservation Division, and the Office of Hawaiian Affairs, Haseko agreed to set aside three distinct preservation areas and to develop, in consultation with the Office of Hawaiian Affairs, interpretive language that could be used to educate the public about the archaeological features within these sites. The original preservation plans approved more than a decade ago called for preserving the archaeological features in place as ruins, and adding walking trails in each preservation area to allow visitors to view the ruins and read informational signs to learn about each feature.

Over the years, historic preservation specialists and Hawaiian community members have come to value more active forms of preservation that attempt to integrate preserved historic properties into the lives of nearby communities, primarily thru educational outreach. That is a vision shared by Kupuna Arline Wainaha Kuuleialoha Brede Eaton, who for the past 15 years has been one of the primary cultural guides for Haseko's development. In 2006, she and Mary Kaipō Malama Serrao established the non-profit Hoakalei Cultural Foundation to ensure good stewardship of the

65

June 29, 2009

Page 2

land and heritage of the area. The Foundation continues to provide invaluable assistance to Haseko in ensuring that development plans are sensitive to Native Hawaiian interests and consistent with our preservation commitments. The Foundation also provides vital oversight of the preservation areas in Ocean Pointe/Hoakalei.

As development approaches the lands adjacent to those preservation areas, the time has come to more fully develop the interpretive language for the archaeological features so that appropriate signage can be in place once the areas become accessible to the public. This information will play an important role in both Haseko's and the Foundation's efforts to raise awareness of the historical and cultural resources within the Ocean Pointe/Hoakalei communities and thereby increase involvement in preservation and interpretive efforts. That is why we are asking for your participation - it is our hope that your input will help create a vibrant interpretive program for the archaeological resources within each preservation area.

We anticipate that the Workshop will involve a number of gatherings, with time for discussion, education, hands-on participation in restoration efforts, and more.

The first Workshop is scheduled for:

Date:	Friday July 31, 2009
Time:	9:00 a.m.
Place:	Ocean Pointe Community Center
Address:	91-6545 Kapolei Parkway (cross street is Kaileole'a Drive) in 'Ewa Beach

This first Workshop will include a tour of the Ocean Pointe/Hoakalei communities, overview of development plans and a visit to the Kauhale Preserve - which includes a federally protected Wetland Preservation Area that provides vital nesting grounds for several species of endangered birds, as well as rock formations from the temporary camps.

We sincerely hope you will join us. To reserve your space at the Workshop, please call Ann Lee at 689-7772 ext. 229 or email her at aylee@haseko.com.

Mahalo,



Nancy Maeda
Executive Vice President



HASEKO

HASEKO (Ewa), Inc.

August 11, 2009

Mr. Michael Lee
91-1200 Keaunui Drive, Apt. 614
'Ewa Beach, HI 96706

Michael
Dear Mr. Lee,

Thank you for participating in our July 31, 2009 workshop. We appreciate you taking the time to come learn about our preservation plans and see what the Hoakalei Cultural Foundation is envisioning for the Kauhale Preserve.

We look forward to building upon the foundation laid at Friday's gathering, and working together with you to develop interpretive signage for Kauhale that will help the community at large learn more about this treasure in our midst.

As a reminder, please be sure to submit the feedback/comment form along with any additional information you'd like to suggest for the signage program. All submissions will be posted to www.kauhale.wordpress.com to allow everyone to see what has been shared with us and increase participation in this program.

In the coming months, we'll be going thru the comments/feedback/information received and will let you know when the next session will be held.

In the meantime, please mark your calendar for Saturday February 27, 2010 at 8:30am. The Hoakalei Cultural Foundation will be sponsoring a work-day at the wetland preservation area within the Kauhale Preserve. Volunteers will help hand-clear the batis/pickleweed to prepare the area for the coming nesting season, and learn about the types of birds that utilize Kauhale. More information will be posted on the foundation's website: www.hoakaleifoundation.org. We look forward to seeing you there!

Mahalo,

Nancy Maeda
Executive Vice President

GN
Ethel Pam
3934
Martha W. Beckwith

How The Opelu Marked Time

Fishing is either a recreation or a business depending on how hungry the fisherman is but it will surprise many to know that before the coming of the white man there was a direct relationship between fishing and chronology.

My friend John Wise told me about it as we were looking at the daily offerings in the stalls of the Oriental mongers down at the fishmarket. It appears that the first haoles who came to Hawaii were mystified to learn that while the names of the months of the year were the same throughout the group, the seasons were not synchronous.

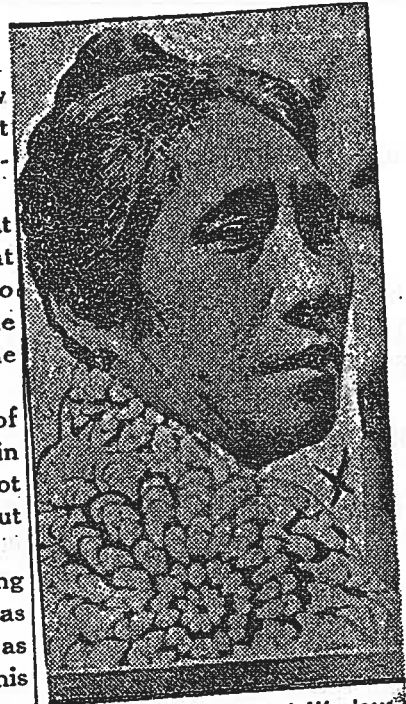
The old Hawaiian year commenced in the latter part of October or early in November, there being thirteen months in the year, or twelve months and a number of kapu periods not counted as time but in the course of a year counting up to about the modern four week lunar month.

The earlier voyagers found that the month corresponding to our December at Hilo or in Kau might be still counted as November by the natives of Maui, Lanai and Molokai, and as October by the Kauai natives. Wise has discovered during his studies of old Hawaiian history and customs that the sliding scale used in marking the beginning of the solar year was governed quite as much by the annual influx of schools of tropical fishes into island waters as by the lunar phases.

The moon marked the duration of the months and time was counted by the number of nights, taking no account of solar position. These old Hawaiians knew the stars and the night skies but recked little of how the sun behaved itself.

Winter and summer were not marked by solar position or by the coming of the flowers or the opening of new buds. Depending so largely on the sea as the source of their main food supply they knew the habits of its denizens, and their season of plenty, corresponding to our spring, commenced when the migratory fishes such as aku and opelu commenced coming up from the south as the waters became warmer.

Hence it will be readily understood why the Kauaian December, or first spring month, might be as late as February as the seasons were marked by the natives of Kau, the waters of Hanalei being cold while those of Honuapo were warm. Summer was the season when fishes of all the species which may be readily netted were most abundant, when seas were smooth and food plentiful. Winter was the time of storms and rough seas, when the food fishes disappeared and pelagic fishing became a dangerous occupation.



Annie Kamakakaulani Woolsey
Harris

auth?



HELU 5589

PALAPALA SILA NUI.

A KE ALII, MAMULI O KA OLELO A KA POE HOONA KULEANA.

No ka mea, Ua hoolohoe na Iama Hoona i na kumu kuleana aina i ka olelo, he kuleana oiaio ko

Pahiha

Kuleana Helu 1504

ma ke ano Kuleana Nui malalo o ke Ano Alodio iloko o kahi i oleloia malalo, a no ka mea

*Ua haawi (mai oia) i na dala he umi o ka waikona
dala (no ka ole) Aupuni i iloko o kea aina*

Nolaila, ma keia Palapala Sila Nui, ke hoike aku nei o KAMEHAMEHA IV, ke Alii nui a ke Akua i kona
lokomaikai i hoonoho ai maluna o ko Hawaii Pae Aina, i na kanaka a pau, i keia la, nona iho a no kona inau
hope Alii na heolilo, a na haawi aku oia ma ke *Ano Alodio* ia *Pahiha*

i kela wahi a pau loa ma *Kawalo Kon.*

ma ka mokupuni o *Pahu* ; penei na mokuna,

*Chormaka ma ole (kahi) Maun maunaz o keia ma ka Pa han
i piki ana (me ka buaa) pahale i hoi.*

Kema 63.45 P.M. 3.53 Kaul ma ka Pihai kiki. ka pohaku kiki. Maun Maun

*Kema 34.30 Koma 3 - " Kauhaholei ma pohaku ma Maun Maun
maka aina o Kalaka*

Maun Ko " 3.18 " Kalaka ma Maun Maun (Pili Pahiha Pa

Maun 27.15 Bika 2.80 " Pahiha i ole (kiki) muu

Ke 1174 anana

Mauna 1. Commencing at a Stone on Est bank of the River a Pihoa at 1000 ft. -
 this land runs from thence S. 35.30 E. 5.67 Ch. bounded by land called Kōroa
 to a large Coral Stone thence S. 16. 6.52 Ch. bounded by land called Kōroa
 belonging to Wahi-kāpua. thence N. 48 W. 3.55 Ch. to River Pihoa bounded
 by land called Hamootahi belonging to Wahi-kāpua - from thence following E. 2. 10
 of River Pihoa to Commencement. Comprising 3.20 Acre.

Mauna 2. Fishing privilege - Commencing at a large stone standing at High water
 mark near a spot on the beach called Pōhaka - this stone is distant from
 the Est corner of Mamohasno on the Sea as follows: - S. 35.30 E. 5.67 Ch.
 S. 21 E. 4.95 Ch. & S. 30 W. 6.75 Ch. - from the above stone the Est boundary
 of this fishing privilege runs S. 64 W. 11.50 Ch. to a Coral Post on inner Reef
 called Pōhaka Kanae on W^{est} side - this fishing privilege commences
 at the mouth of the Mutei called Yua-kēhau - from thence running
 out to a certain Coral Post S. 26 W. 18.50 Ch. - from thence following
 the Reef to the Post Pōhaka Kanae.

Koe nāe ʻOle Kuleana o na Hanaka

Maloko ʻe ʻOle Kuleana ʻAparua

99.68

Fishing Privilege

Eka

a oi ike aku, a eui ike mai paha. Ua koe nāe i ke aupuni na oino mīceralā a me na metala a pau.

No

A. K. Kōhōkalo

ua aina la i haawii ma ke ʻAho ʻAloha a no kona mau hoōlina, a me kona waihoā, ua pili nāe ka auhau a
 ka Poe Ahaole e kau like ai ma na aina aloha i keia manawa i keia manawa.

A i ʻAho o ikeā'i, Ua kau wau i ko'u inoa, a me ka Sila Nui o ko

Hawaii Pae Aina ma Honolulu i keia la

23 o Maraka 18 66

Kamehameha 18

By the Hon. J. H. K. K. K.

(69)

Council of the City and County of Honolulu

Certificate

HONORING AND COMMENDING THE EWA BEACH LIMU PROJECT

At one time edible and medicinal seaweed known as ogo limu or manaua grew abundantly along the coastline of Oahu, from Sand Island to Kalaheo. One'ula Beach Park in Ewa Beach provides especially favorable conditions for limu. Henry Chang Wo grew up in Ewa Beach and remembers lying down as a child in shallow water on the limu beds, like beds of grass. 60 years have since passed and Uncle Henry has observed the alarming depletion of the limu. Contributing to the decline are over-harvesting, shoreline development, and the decrease of fresh water flowing into the shallow areas where limu grows.

Henry, along with Mike Lee and Walter Kamana working in conjunction with the Queen Lili'uokalani Trust, formed the Ewa Beach Limu Project (EBLP) in 1999. Their vision is to restore the last of the limu along the Ewa Beach coastline while making every effort to replant for future harvest. The EBLP strives to educate the community about this valuable resource by offering monthly classes free to the community to learn about the correct methods of harvesting limu and how to replant it. For over 5 years, science teachers and students from Campbell, Nanakuli, and Wai'anae high schools as well as Leeward Community College have worked with the EBLP to replant and preserve the last of the limu. The EBLP is focused now on establishing a moratorium on harvesting limu on the One'ula shoreline for 1 year to allow for recovery and strengthening of the species.

Therefore, on behalf of the people of the City and County of Honolulu, the Council extends its heartfelt appreciation and aloha to the organizers and dedicated volunteers of The Ewa Beach Limu Project for their work to educate the

Maunaloa and the Ewa Beach Limu Project great success with their endeavors to protect, preserve and perpetuate the presence of limu for future generations of Hawaii's residents to appreciate and enjoy.

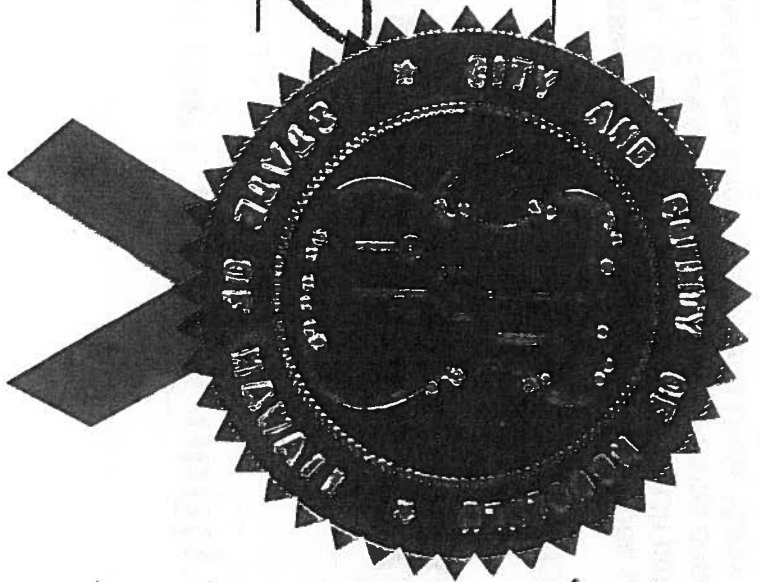
Dated: January 28, 2004

Mike Gabbard

MIKE GABBARD, Introducer

Donovan M. DeLa Cruz

DONOVAN M. DELA CRUZ, Chair



John H. H. H.

John H. H. H.

John H. H. H.

John H. H. H.

John H. H. H.

John H. H. H.

John H. H. H.

ING DIRECT

Save your money

Member FDIC

High Interest.
No Fees. No Minimums.**The Orange Savings Account**

Open Now

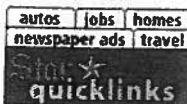
**Star Bulletin**

Vol. 13, Issue 28 - Monday, January 28, 2008

Info | Mobile Edition | Corrections | Calendars | Movies
Obituaries | Vital Stats | Weather | Surf | Subscribe

Search

StarBulletin.com Web Go »



- Classifieds
- Newspaper Ads
- Government Section
- SPECIAL SECTIONS**
- Island Homes
- Food For Thought

the BIG

Reader Poll

Who should be the starting quarterback for the UH football team?

Back Issues

(1996-Present)

M | T | W | T | F | S | S

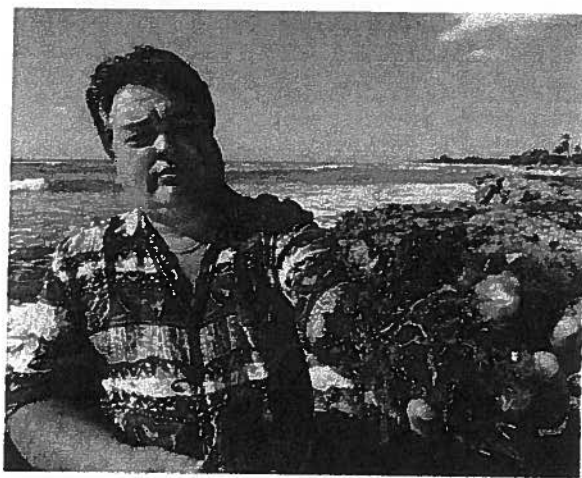
Sections

Local News
Features
Sports
Business
Editorial
Travel (Sunday)
Corrections
Blogs
Gallery
Calendars
Movies
Special Packages

Subscribe
Newsstands
Directory
Freelancers
E-Mail Headlines
RSS/XML

Subscribe to the Print Edition**SUBSCRIBE TODAY**

Classifieds
Autos
Island Homes
Jobs



DENNIS ODA / DODA@STARBULLETIN.COM

Michael Lee, a member of the Ewa Beach Limu Project, walked along Oneula Beach on Thursday and collected these different types of limu. A recent court decision denied a permit for constructing a drainage ditch outlet that would discharge storm-water runoff into the ocean off Oneula Beach. Lee said he understands the drainage issue but would rather have a retaining dam there instead of a drainage outlet.

Limu delays project to ease Ewa flooding

Some advocates fear the plan would destroy more of the now rare marine plantBy Rosemarie Bernardo
rbernardo@starbulletin.com

In years past, an abundance of limu — native seaweed — regularly washed ashore on the remote sandy beaches of Oneula Beach Park in Ewa Beach.

Today, rarely is any found, due to environmental changes and overpicking, according to scientists and cultural experts. And the existing seaweed is reachable only during low tide along the rocky coast.

LIMU ON THE LINE

A circuit judge recently vacated the Board of Land and Natural Resources' decision granting a permit to Haseko Inc. to construct a drainage outlet off Oneula Beach Park.

Inside | Jan. 28

Hawaii News

- » Sandy's gets high surf; Ferry cancels rides
- » Isles top nation in price of gas
- » The war on disease in Asia: HIV/AIDS
- » Limu delays project to ease Ewa flooding
- » Ariyoshi urges care with N. Shore plan
- » Radio station on Kauai rapped for suspensions
- » Newswatch, Police/Fire
- » Kokua Line
- » Corky's Hawaii
- » Photo Finish
- » Island Images
- » Obituaries
- » Shining Stars
- » Corrections
- » Weather

Features

- » LOST? Find your way back to Season 4
- » Noah Orr is an adventurous spirit
- » Da Kine
- » Digital Slob Returns Next Week
- » Cel Shaded

Sports

- » Jerry Pate is last man standing at Turtle Bay
- » Punahou waits for states as new No. 1
- » Kamehameha earns top seed in girls soccer
- » Notebook: Golf
- » Hawaii Beat
- » Scoreboard
- » TV & Radio

Business

- » Cemetery worker upbeat about life
- » Tech View
- » Business Briefs
- » WSJ Sunday
- » Dilbert

Editorial

- » Medical pot users need job protection
- » Neither party can stand in way of stimulus bills
- » Gathering Place
- » Letters



shop now

shoes.com

Open Now

The Orange Savings Account**High Interest.****No Fees.****No Minimums.****ING DIRECT**

Save your money

Member FDIC

Government Section
Bidding Advantage
Advertise

Now the rare marine plant, valued in Hawaiian culture as a source of food and medicine, has taken center stage in a dispute over flooding-mitigation measures.

Eileen Hirota, former principal of Ewa Beach Elementary School for 16 1/2 years, recalls wading through knee-deep water in the parking lot after heavy rain; teachers would carry kids piggyback to their parents' cars.

"It was really bad," she said. "It would take about two days for the water to evaporate."

A developer's proposed response: an \$8.1 million storm-water drainage system.

The 200-foot-long system would include a concrete headwall and unlined open channel and would incorporate a series of sediment traps, grassy swales or depressions and catch basins that meet city standards, said Sharene Saito Tam, a spokeswoman for the builder, Haseko (Ewa) Inc.

"These measures will help to clean the storm water from Papipi Road before it reaches the ocean, much more so than any of the seven existing ocean outlets that have been in use for that neighborhood for the past several decades," she said.

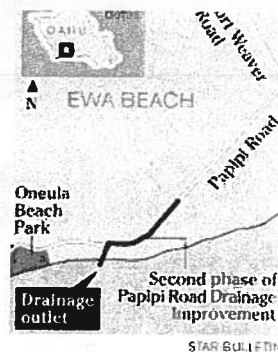
Critics say it will destroy what little limu is left.

Opponents of the outlet gained a recent court victory when Circuit Judge Eden Elizabeth Hifo vacated a Board of Land and Natural Resources decision granting Haseko a construction permit. In her ruling for the Native Hawaiian Legal Corp., which represented Michael Kumukauoha Lee of the Ewa Beach Limu Project, Hifo said there is not enough information to conclude that the outlet will not have unfavorable "cumulative effects."

The permit application was sent back to the board for more work, stalling the second phase of the project.

"We're obviously disappointed that the community has to wait a little longer for the drainage that they've been asking for decades now," Saito Tam said.

Lee calls the court's decision a victory for the limu. He said he does not dispute a need for a drainage system, but recommends an alternative that does not have any detrimental effects on marine life.



Columns | Jan. 28

Corky's Hawaii
Corky Trinidad

Kokua Line
June Watanabe

Photo Finish
S-B Photographers

Island Images
S-B Photographers

Digital Slob
Returns Next Week
Curt Brandao

Cel Shaded
Jason Yadao

Tools

Email this article

Printer-friendly

E-mail City Desk

LIVE THE
Legend
OF MALUAKA



Maluaka
HAWAIIAN ISLANDS

RESIDENCES
FROM \$4 MILLION

www.maluaka.com
Ads by Google



DENNIS ODA / DODA@STARBULLETIN.COM
Lee walks along the rocky areas of Oneula Beach looking for and gathering limu.

In a contested case hearing last year, the Native Hawaiian Legal Corp. presented alternatives to Haseko's storm-water outfall that included storage and percolation and a vegetated detention basin. The agency also claimed that the developer failed to adequately evaluate several mitigation measures such as grassy swales and an oilwater separator that could reduce the impact of storm-water runoff on coastal waters.

Lee said the basin would filter the runoff of any oils and heavy metals.

A temporary retention basin is currently set up on five acres of land to address the storm-water runoff for the first phase of the project. Lee said Haseko should make the basin permanent.

But Saito Tam said it is not large enough to accommodate the entire drainage system along Papipi Road that stretches from Ewa Beach Elementary to the ocean. More homes are also slated to be built in that area.

Greg Hiyakumoto of R.M. Towill Corp., project engineer of the drainage system, said, "The bottom line is that we designed whatever pollutant-control measures we could into the drainage system based on what would be acceptable to the city (Department of Facility Maintenance)."

Lee is among a half-dozen people with the Ewa Beach Limu Project who educate students about the need to protect limu as a source of food and medicine and as a cultural resource for native Hawaiians.

About a decade ago, Lee said, a variety of limu was found off Ewa Beach all year around.

"Now it's all bare," he said.

Dovetailing the limu decline is a drop in sand crabs and fish, said fishermen Albert Lauro and Teo Tangjian.

Marine scientist Brian Lapointe of Florida has said the cumulative impacts of the storm-water runoff at the proposed sites would likely cause the loss of limu species, coral and invertebrates such as sea urchins and anemones.

Michael Kunukavoha Lee Gathering
Right's material for North Kohala:
and For Honolulu Ewa, Oahu © 2010

1.) gathering Rights of the mawae wae
Ceremony (pupu mo'o) found at Seashore

2.) The (wavy cave sponge) 'ANA
Leiodermatium sp
Found in under water caves

3. gathering limu Poha (*Hydroclathrus*
clathratus)

4. gathering limu Lipoa both *Dictyopteris*
austriacis (Deep water limu)

5. gathering limu Lipu'upu - *Valonia*
verrucosa distinctive egg-shaped
seaweed is a single liquid-filled
sack large ones 5 cm across. Dark
silvery green color. corals at deeper
depths.

6. Limu A'Alauka (*Codium Reediae*)

7. Limu Huhu'ilo *Griffordia brevicinctula*

8. Limu Ulva fasciata - Limu Palahalabta

9. Limu Kalalau Nui Nui - *Sargassum echinocarpum*

10. Limu Kalalau Li'i Li'i - *Sargassum obtusifolium*

11. Limu Lauoho'o Pele - *Alnitellaria concinna*

12. Limu Kahu - *Asparagopsis taxiformis*

13. Limu Ohelo - *Botryocladia skottsbergii*

14. Limu Manavea - *Gracilaria hirsutissima*

15. Limu Huhu'ilo *Griffordia brevicinctula*

16. MANAUA - GRACILARIA CORONOPIFOLIA
17. LIMU HO'ELE'ELE - GYMNOGONGRUS sp.
18. LEPELEPE O HINA - HALYMENIA FORMOSA
19. LIMU HUNA - HYPNEA CERVICORNIS
20. LIMU NO WALU - JANIA sp.
21. LIMU MANE'ONE'O - LAURENCIA NIDIFICA
22. LIMU LIPE'EPE'E - LAURENCIA SUCCISA
23. LIMU PUAKI - LINGONIA MAXIMA
24. LIMU PATE'E - PORPHYRA sp.
25. LIMU HRUA - PLOCAMIMUM SANDVICENSE
26. LIMU AWA - TRICHOGLOEA REGUIENII
27. Loli okuhi Kahi Black Sea
CUCUMBER HOLOTHURIA ATRA JAEGER
28. KUALAKAI
29. A. PULMONATE Sea Hare - APLYSIA
pulmonica GOULD
30. B. DOLABELLA auricularia
31. C. DOLABRIFERA dolabrifera
32. D. APLYSIA JULIANA QUOY and GAIMARD
33. E. APLYSIA PARVULA MARCH
34. F. APLYSIA OCULIFERA ADAMS & REEVE
35. G. APLYSIA DACTYLOMELA RANG
36. OPITI AWA SIPHONARIA NORMALIS GOULD
37. EKAKA KU MOANA Black Coral
(ANTIPATHESSE GRANDIS)

38. Hawaiian Zebra Blenny - Pā'ō
Isiblennius zebra
39. Pā'ō Bullethead Blenny *Blenniella*
gibbifrons
40. Pā'ō GARGANTUAN Blenny
Cirrhipectes obscurus
41. Pā'ō 'a KAUILA - *Exallia brevis*
42. SCARFACE Blenny. Pā'ō
~~GIAIPE~~ *Cirrhipectes vanderbilti*
43. ULA KAUILA PUHI - Red eel
44. WELKE 'ULU Yellowfin goat fish
45. Pu'u oia crowned Toby ~~GAR~~ *Canthigaster*
coronatus
46. O'opu Hue Kēkē Stripe Belly Puffer
AROTHRON hispidus
47. Spotted Puffer O'opu Hue Kēkē
AROTHRON meleagris
48. HUMUHUMUNUKUNUKU APUA'A
- *RHINECANTHUS rectangulus*
49. - *RHINECANTHUS aculeatus*
50. HUMU HUMU LEI - Sufflamen bursa
51. Black-stripe Coris - Hila *Coris flavovittata*
52. HINALEA 'AKILOLO Bird WRASSE
GOMPHOSUS varius LACEPÈDE

53. Kūmimi - Splendid Pebble Crab
Etisus splendidus Rathbun

54. He'e puloa, He'e Maloko
Ornate Octopus
- *Octopus ornatus* Gould
- *Octopus hawaiiensis*

55. KAUNA OA WORM.
Medusa Spaghetti Worm
Loimia medusa

Ka Inoa-Au-wai-o-Limu Michael K. Lee
 (C) 2010

1. Limu AKA A/ko
2. 'A 'ALA 'ula
3. Limu AKI 'AKI
4. Limu AKI ula
5. Limu 'AKO 'AKO
6. Limu AKUila
7. Limu ALA ALA ULA
8. Limu ALani
9. Limu 'AI a Ka Honu
10. Limu 'aka'ako'a ula
11. Limu 'anapanapa
12. Limu 'āpi 'ipi'i
13. Limu a'ula
14. Limu aupūpū
15. Limu 'awa
16. Limu 'awa kea
17. Limu 'awe'awe'a
18. Limu 'aweo weo
19. Limu eKaHaKaHa
20. Limu 'ele au (fresh water)
21. Limu 'ele'ele
22. Limu 'elo'elo
23. Limu Hana
24. Limu Ha'ula
25. Limu Hā wane
26. Limu Hina ula
27. Limu Hila
28. Limu Hika
29. Limu Holo Moku
30. Limu Hona
31. Limu Ho'onunu
32. Limu 'Ahu 'A Kai

83.

33. Limu Huhu
34. Limu Huhu Huhu I'lio
35. Limu Huhu I'lio
36. Limu Huhu Huhu waena
37. Limu Huhupua'a
38. Limu Huhu WAWAE Iole
39. Limu Huna
40. Limu Huna pake
41. Limu HUNE HUNE
42. Limu Hūpē Kōhōlā
43. Limu Hu'aHu aKai-
44. Limu Hui Hui
45. Limu Hui Hui Makali'i
46. Limu Hūwāi
47. Limu 'Ilio
48. Limu Iliokā
49. Limu Ilio Hui'a
50. Limu Kā 'ape 'ape
51. Limu Kaha KALIA
52. Limu KALIA
53. Limu Kā'ele
54. Limu KāHili
55. Limu KALIA Lau Li'i Li'i
56. Limu KALIA Lau Nūi Nūi
57. Limu KALIA ula
58. Limu KAUNA ō'a
59. Limu Kāwelu
60. Limu Hina KALIA
61. Limu Lipoa
62. Limu Lipoa O Nii Hau
63. Limu Lipoa Kua Hiwi

Tyler

80)

64. Limu ke Ku wehu
65. Limu Kele
66. Limu Ki He
67. Limu Ki KALA
68. Limu Kiki
69. Limu Kipa AKi
70. Limu KALA MOA
71. Limu Kiki
72. ^{Tree} Limu Kili HONE
73. Limu KIMAU
74. Limu Kō'ELE
75. Limu Kō'ELE'ELE
76. Limu KōHŪ
77. Limu KoiALE
78. Limu KōKō
79. Limu KōLŌA
80. Limu Kū KAE O KAMA PUA'A
81. Limu Kū KAE O PUE O
82. Limu Kū Ape peiao
83. Limu Kū Hiwa
84. Limu Kū pepiao
85. Limu Kūmū Limu KALA
86. Limu Kūmū Lipoa
87. Limu Kū WELŪ
88. Limu LAU ŌHŌ. Ō. PeLE
89. Limu Lipū'ūpū'ū
90. Limu Lepe AHINA
91. Limu LeHe LeHe 'i LiŌ
92. Limu LeLe pō
93. Limu Lepe Lepe o HINA
94. Limu Lepe o HINA

233. Limu Palawai

Interestin Limu States

234. Limu Hula Hula Manavea.
235. Limu Lepe Lepe Mōi
236. Limu Pii Hula Hula
237. Limu Paakaiokala. Replenish Body Salts.
238. Limu Paakai
- ~~239. Limu Pūpū Wāwāhi~~
240. Limu Hula Hula Kai -
241. Limu Hina Kala
242. Limu Pā Hula
243. Limu Kōhu 'ele'ele green
244. Limu Kōhu 'ula'ula Red
245. Limu Kōhu Malama yellow
246. Limu Aiake
247. Limu Kauna Pala (pig's Limu) ←
248. Limu Kiokio Manavea
249. Limu Lepepe au Lana Pajō
250. Limu Pūhe ula ula
251. Limu Lau Lau 'ele'ele (Limu Lau Lau 'ele'ele)
252. Limu Pū Kala Kai Manini *
253. Limu Honu Kala
254. Limu Honu Nui (Limu Honu Nui)
255. Limu Kaupau
256. Limu Wāwāhi Wāhi
257. Limu Lipō
258. Limu Lipa He'e
259. Limu La Ha La Ha
260. Limu Lipa Ha Ha
261. Limu Kupuna o Kala
262. Limu ā'ula
263. Limu Polū Polū
264. Limu Iwi Iwi
265. Limu Ilo Ilo
266. Limu Pāhā Lā
267. Limu Anu He Nu He
268. Limu Kupu Kupu 'Ala
269. Limu Ula Pōni Lau
270. Limu Wai Pa Hele
271. Limu Koke Malaka Li? (60)

94 p 252 Limu 'ō Hi 'ō Hi 'ō

94 p 253 Limu Pā Pā Ka Ha Kai

96 p 254 Limu Ha'a

96 p 255 Limu Wāwāhi Wāhi

96 p 256 Limu Kaupau

98 p 257 Limu 'ape'ape'e

258 Limu Makeo Hana

259 Limu Makeo Hana

260 Limu Nai Nai

261. Limu 'ō Hana / Na Limu 'ō Hana

263. Pāpā Hana Limu

264. Auwai o Limu

265. Limu umu umu Ke Kaha

266. Limu Kumu Hona

267. Limu Kama Va LeLe

268. Limu Palala / not
Palatala but another
name for palatala-

269. Wai Wai ole ula

196. Limu pānoho nōho.

197. Limu pāno'ono — the reef at low tide

198. Limu pāpakea

199. Limu paku-o Hihika

200. Limu lepe lepe

201. Limu petu

202. Limu pepe a Hine

203. Limu pepi ao

204. Limu pepe ulu

205. Limu pilali

206. Limu piloli

207. Limu pili kō'a

208. Limu pili pili kō'a

209. Limu pipi lani

210. Limu pōta

211. Limu pōta pōta

212. Limu pōlao

213. Limu pōpōhe Mākali

214. Limu puaki

215. Limu puulu - (surgeonfish) puwahu

216. Limu puha

217. Limu pūkō'akō'a

218. Limu pūpū ne lio

219. Limu uaua loli

220. Limu ua ua kili hune

221. Limu ula ula

222. Limu ula ula ilio

223. Limu 'ūnoko

224. Limu wale wale

225. Limu wae wae 'iole

226. Limu wae moa

227. Limu wāwāhi wā

228. Limu welu welu

(FRESH WATER ALGAE)

229. Limu kala wai (Spirogyra spp)

230. Limu haulelani thread like Cladophora Spirogyra

231. Limu Pule 'ūha'ūha

232. Limu Pule mā'ūe

Limu kūhiwa

"Place Names of Hawaii"

Pau-mau

ipā-pua. Gulch, Honolulu qd., Maui. *Lili.*, flower enclosure or baby fish enclosure.

Parker. Place, Mānoa, Honolulu, named for the Reverend Henry H. Parker (1834-1927), son of a missionary and pastor of Ka-wai-a-Ha'o Church for 54 years. He was coauthor of the Andrews and Parker Hawaiian Dictionary. Elementary school, Kāne-i-ohē, O'ahu, named for the Reverend Benjamin W. Parker (1803-1877) of the sixth missionary company, father of Henry H. Parker; he opened the first school in Windward O'ahu in 1837.

Parker Ranch. A 185,610-acre cattle ranch in northern Hawaii started by John Palmer Parker in 1837.

Party. Drive, upper Mānoa, named for two brothers, R. William Party and Captain John Party, who settled in Hawaii in 1840 and who lived in the area. (T.M.)

Pau. Street near the McCully bridge, Wai-iki, Honolulu, named by Bruce Cartwright who subdivided the area. (T.M.) *Lili.*, finished (canoe races on the Ala Wai Canal finished here).

Pau-ahi. Land section and gulch, Wai-pi'o qd., land section, Kailua qd., pit crater, Puna qd., Hawaii. Street, downtown Honolulu, named in memory of the great fire of 1886 and of the aunt of Bernice Pau-ahi Bishop (and mother of Princess Ruth) who had been named Pau-ahi because as a child she was saved from a fire. Building, Puna-hou campus, Honolulu, donated by Charles Bishop in memory of his wife, and built in 1894. The administration building at the Ka-meharua Schools, built in 1964, was named for Princess Bernice Pau-ahi, the benefactress of the schools. The Bishop Museum entomology building, built in 1964, is named Pau-ahi Hall.

Lili., destroyed [by] fire.

***Pauahala.** Point, Airport qd., north coast of Molokai.

Pau-eono. Point, Ka-mali'o qd., north Molokai. On a 1922 quadrangle map the name was spelled Pauano. *Lili.*, six destroyed.

Pā-uli. Place, 'Aiea Heights, Honolulu. (T.M.) *Lili.*, enclosure [of] beauties.

Pau-ka-uli. Land section, Hale-iwa, O'ahu. *Lili.*, the lightning ceases.

Pauku-kalo. Homesteads, coastal area, and surfing area, Ka-hulu, Maui. See Pitiana. *Lili.*, taro piece.

Pauku-pahi. Land division near Hilo, Hawaii. *Lili.*, section cut off short.

Pā-ula. Small beach east of the mouth of the Wai-uku River, Hilo, Hawaii. Queen Lili'u-o-ka-lani planted seaweed here; a surfing area here has the same name. *Lili.*, red enclosure. Beach west of Ka-ha'o, Kailū, Hawaii, named for a beautiful woman who played *kīno* (jacks) with Kō'e, one of Pele's lovers. Pele turned the two of them to stone from the waist down; from the waist up their bodies were reduced to ashes. There was a large cave with a pool here, and a canoe tapping called Pā-ula Kai. *Lili.*, red enclosure. Drive, Wilhelmina Rice, Honolulu.

Pau-mau. Land section, Girl Scout camp, satellite communication station, and surfing beach now known as Sunset Beach, Ka-huku qd., gulch and stream, Pu-u-kapu and Ka-huku qds., O'ahu. *Lili.*,

of the

Planting Seaweed
Queen Lili: U-O Kalamani

ISABELLA Abbott (Lili)

ries. The Bishop Museum has on tape (E. Williamson, personal communication) the statement (used in Abbott & Williamson, 1974) that this seaweed was transplanted from Honolulu (northwest of Lahaina, Maui) to Wai (on O'ahu) for Queen Lili'uokalani. Mrs. Mary Kawena Pukui gave us information that had been related by Mrs. Lilihi Webb that Mrs. Sam Nowl brought some living plants on rocks from Molokai. These rocks were placed in the seawall of the Queen's place (near the present Waikiki Aquarium). *kepu* was placed on them to save them from being destroyed. *Grateloupia* *isida* still occurs along this stretch of Waikiki and is abundant northwest of the Māla area near Lahaina, Maui Island, and at Kupeke fishpond, Molokai Island. It is worthy of note that the common name "chop-chop" for this alga otherwise known throughout the islands as *buluhuluwauwau*, is known from the Lahaina and Kupeke areas, which are across a sea channel from each other.

Uses of seaweeds among other Polynesian peoples were either infrequent in the past or have been so curtailed that only one to three species are reported to be in use today. Of persons interviewed from Samoa, Tonga, Fiji, the Tokelau Islands, and Tahiti, only *Caulerpa*, a green alga common to all of those areas, could be described accurately enough for identification. The seaweed is eaten raw with coconut cream or grated fresh coconut added, a practice not known in Hawaii; this is not surprising, since coconut played a relatively minor part in Hawaiian food preparation and was one of the foods prohibited to women before 1819.

Continuing interviews have yielded more information along the line previously pursued. Moreover, notes transcribed in the interval since 19 demonstrate clearly what acute observers the Hawaiians were. The best example is that furnished by Mr. and Mrs. Lyons K. Naone, Sr., Māalaea, Maui, who described the common species of *Codium*, for which they used the common name *wāwae'iole*, as follows: for *Codium arabicum* "nui ka lau, ku ihu" (translated to mean large leaf, standing up); for *Codium edule*: "maka'ili'i ka lau, ne'ene' i'ila" (small leaves, creeping); for *Codium redlichi*: "kumu la'au pu'upu'u" (stands up in clusters).

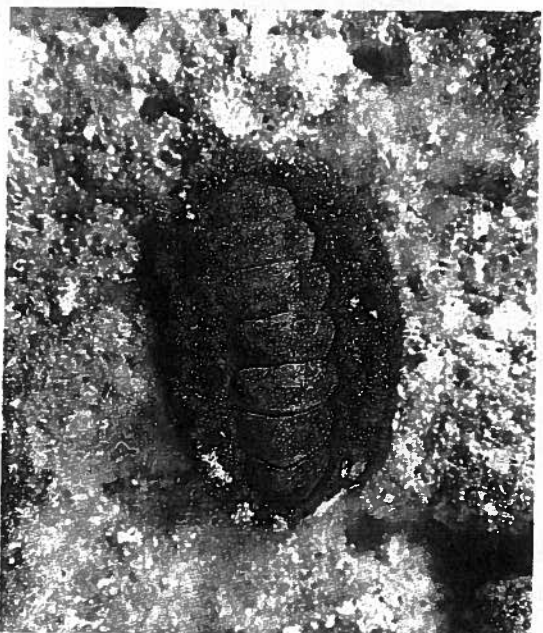
Descriptions as specific as these are as accurate as many of the earlier scientific descriptions of plants. Such acute observations give credence to information that it is in the oral tradition. These Hawaiian descriptions distinguished among species of *Codium*, though all of them were called *wāwae'iole*, which corresponds to a genus name. Could a primitive binomial system of naming organisms have been practiced by the Hawaiians? The information on *limu kōbu* from Kaula (where it is more common than on other islands and is included in food customs) shows that two colors are distinguished—*kōko* or blood-red, and *lipēhe* or light-colored. Other terms are used when speaking of the living plants. Other algae are also

Waikiki
181
Hilo

1975

CHITONS
CLASS POLYPLACOPHORA (AMPHINEURA)

Chitons are the most primitive of the common seashore molluscs. In a class of their own (variously called Polyplacophora or Amphineura), they have shells composed of eight narrow, usually overlapping plates surrounded by a band of tough flesh called the girdle. Chitons cling tenaciously to rocks with their foot, often in the surge line or just above it, where they creep slowly about scraping algae. If disturbed they clamp down on the rock like living suction cups and are difficult to dislodge. Most grow no longer than a few inches, although the Gum-Boot Chiton (*Cryptochiton stelleri*) of the north Pacific coast of America and Asia is about a foot long. Hawai'i has four recorded species (and probably several unrecorded ones), all small and inconspicuous. In old Hawai'i chitons were sometimes called *pūpū mo'o*, literally "lizard shell."



GREEN CHITON • *kūapa'a*
Acanthochiton viridis (Pease, 1872)
Family Acanthochitonidae
• These animals occur in small depressions on wave-washed limestone reef flats. Greenish overall, their girdles covered with small spines, they are the largest Hawaiian chitons. An old Hawaiian riddle asked "What is the fish that has eight scales?" The answer was *kūapa'a*, or "chiton." (On O'ahu, however, these chitons were called *pūpū-pe'eia*, or "catpillar shell"). In ancient times chitons were used in a ceremony called *māwae wae* held a few days after the birth of a child. To about 1 1/2 in. Possibly endemic. Photo: Barber's Point, O'ahu.



FLAT CHITON
Ischnochiton petaloides (Gould, 1846)
Family Ischnochitonidae
• These colorful little chitons may be gray, blue, yellow, green, or whitish with orange margins. They occur under rocks in tide pools or reef flats. To almost 1/2 in. Possibly endemic. Photo: Scott Johnson.

c 2010
Michael Kuuau Kuuuoka LEI
I use the Maawae wae
custome in Eua.

Shepherd K. Kuu

A week later, I reported to Sam that I had made contact with John Maciolek and summarized the latest reports of reproduction. Sam provided the additional information:

August 23, 2004: *All my larvae hover in the brightest corner of my tank at work. They are phototactic and so assemble in large numbers there during the right times of year. Right now there are only about a dozen or so of the larvae in the bright corner of the tank. Sometimes there are 50 or more at a time. There are juveniles of all sizes as well, of course, a good size distribution that runs from just over a mm to large adult size. ~Sam*

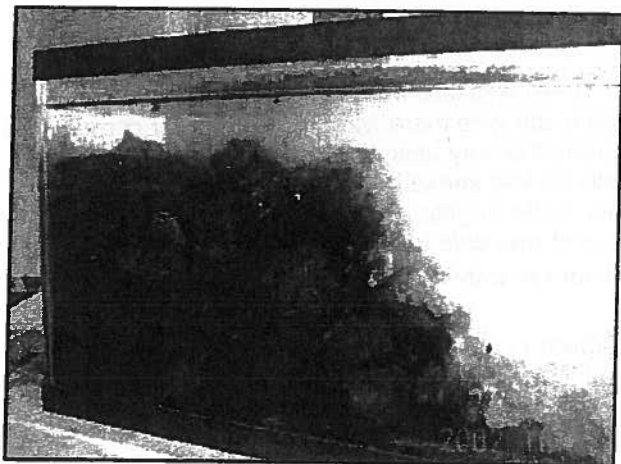
Something wasn't right! Initially I didn't know much about Sam Gon's background, only that he began reproduction trials when his son had to do a science project. Obviously Sam had a broader more extensive knowledge base and finally got this from him!

August 25, 2004: *Actually I got started on this in 1986 when with Maciolek, Chai, Brock and others, we undertook a statewide overview of anchialine pools for the County of Hawaii. I've been in the field with those guys to some of the most famous anchialine pool sites in the state.*

I've had my 15 gallon opae`ula tank with shrimp from Ewa pools (now destroyed) for well over a decade. I started with perhaps 40 adults and now I estimate there must be 500+ shrimp in there. The tank easily generates 200 larvae a year.

Having my son do an `opae`ula project was our idea, not his science teacher's. We were just walking around the house looking for things that might work well for a project, and stopped at the 5-gallon tank I have at home. If it hasn't been explained to you before, the set-up I use in my 15-gallon tank is simple: fill the tank roughly halfway with brackish water, ca 1 part seawater to 8 parts fresh.

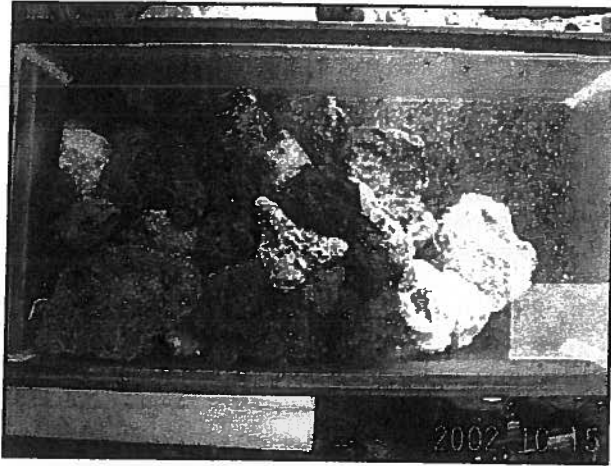
On the side of the tank farthest from a light source, set up a pile of cobbles, ranging from half-fist to whole fist size, so that at the far end the cobbles come all the way to the top of the tank, and at the lit end, there are no cobbles at all. This creates a "ramp" of cobbles from one end of the tank to the other and a large cobble-free water column on the lit end. Thus half the tank's area is a dark maze of intercobble spaces, and half of the tank is well-lit water column in which larvae can hover freely. By the time all cobbles are in the tank, the water is raised to near the top of the tank as well. I hope the description is clear enough! ~Sam



I first learned of Sam Gon from John Pescador of Honolulu who wrote to compliment the Micro-Lobster website. He wrote of his interest and recommended I contact his teacher Sam and allowed use of photos from his website.

John Pescador October 15, 2002 photo:
Side view of Sam Gon's opae-ula 15-gallon tank.

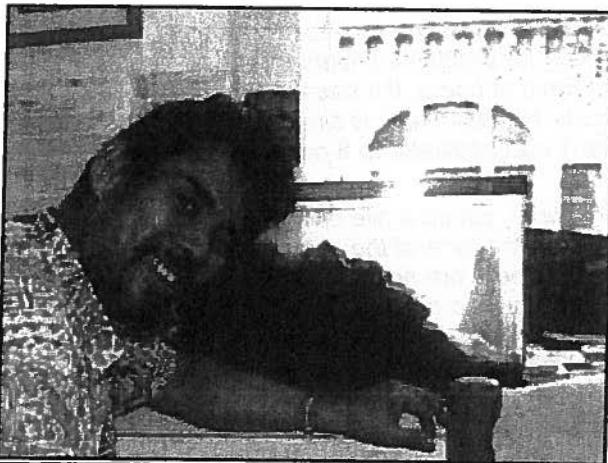
86



*John Pescador October 15, 2002 photo:
Top view of Sam Gon's opae-ula 15-gallon tank.*

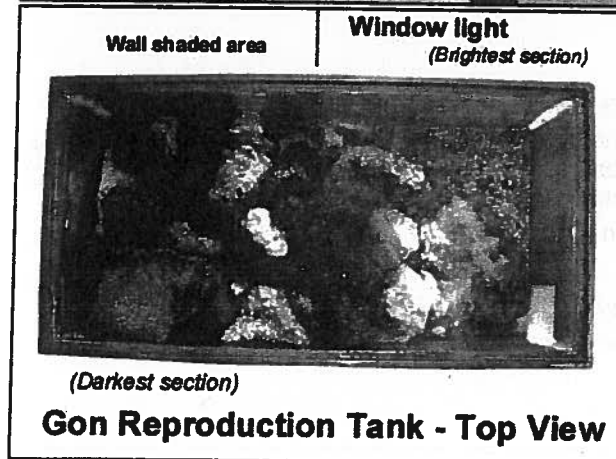
UPDATED HONOLULU TRIP REPORT

On November 12, 2004 I had the pleasure of visiting Dr. Sam Gon III to observe his opae-ula tank. Other researchers have had opae-ula tanks in their laboratories but to my knowledge none have allowed publishing photos of them. I'm told that if tanks are clear and do not have hiding places, that the opae-ula will not reproduce in tanks. Sam's tank is over 10 years and producing steadily.



Meet Dr. Sam Gon III! For a fellow that has built an impressive reputation, he turned out to be much younger than I thought, but clearly a serious person who is knowledgeable in a wide range of subjects. When I visited he was in the midst of some submittal deadlines but took the time to answer my questions.

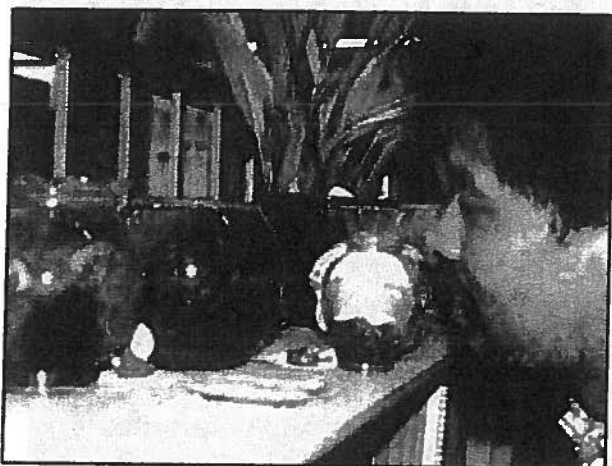
His tank has the characteristics of other 1/2 to 1 gallon researcher jars but was much larger. He provides a lot of light to be able to produce enough algae so there is enough food.



There was one warmer very bright corner and on the opposite side there was a cooler darker corner. This has been the only tank that I've seen these factors and it really makes sense! Newly hatched larvae tended to cluster in the brightest corner. I had an clear plastic cube and was able to collect and observe the newly hatch larvae with the 5x jeweler's loupe.

Sam's opae-ula were originally collected in an Ewa sinkhole and is of the type that I call "banded opae-ula" as some of them have white bands crossing red bodies and including other color variations.

Sam has opae-ula collected from many locations and in jars of various sizes throughout The Nature Conservancy of Hawaii 3-story building. He allows a



heavy amount of algae and notes that different algae types form. He also notes that there is a spurt of reproduction in a new unit and slowing down when it attains a natural balance.

He tells me Honolulu water does not have chlorine so he uses tap water allowed to stand a day or so to bring the water level of his tanks back up to offset evaporation.

I thank John Pescador for introducing me (via email) to Sam Gon and Sam for his willingness to share his knowledge. Sam has been involved in opae-ula and anchialine pond surveys and know that Sam's group discovered that opae-ula had colonized the Sailor's Cap blast crater on Kahoolawe created when the military detonated 500 tons of explosives in 1965. There are very limited fresh water resources on that island and the pool water has almost the same salinity as the ocean. This suggests that opae-ula may one day be discovered in marine conditions in the reefs or ocean floor rubble.

Opa-ula research is progressing very rapidly due to the aloha spirit of people like Sam and John. They've created a lot more leads and along with members of the Fuku-Bonsai Micro-Lobster Team, we're getting a greater insight into opae-ula. They really are amazing creatures!

Right now the anchialine pools are being compromised by alien predator fish being introduced and this forces the opae-ula to retreat into the subterranean habitat. Although they are not in danger of becoming extinct, they are becoming less and less accessible. The information being shared are part of the research to design and construct a large scale captive breeding mass culture system as this is perceived to be the primary future source of opae-ula if fish continue to be introduced into the anchialine pools or if it becomes illegal to collect from the pools. The key is to develop and obtain support for sustainable harvesting of anchialine ponds to provide the needed quantities of broodstock needed for the captive breeding mass culture systems! Stay tuned! ~~~David

*** [Return to CARRIE'S PART I REPORT on learning to feed Micro-Lobsters](#)

*** [Return to CARRIE'S PART II REPORT of combining 4 smaller tanks into one larger one](#)

*** [Return to CARRIE'S PART III REPORT of spotting post-larval juveniles](#)

*** [Return to CARRIE'S PART IV REPORT on eggs and larvae](#)

*** [Return to DAVID CHUNG'S PAGE \(which was the first detailed report of berried females, larvae, and post-larvae!\)](#)

*** [Return to Fuku-Bonsai Home Page](#)

*** [Go to Micro-Lobster Mail Order](#)

*** [Return to the Micro-Lobster Home Page](#)

*** [Go to Products & Prices](#)

© Fuku-Bonsai 2003, 2004

You are cordially invited to visit the home of the Micro-Lobsters at

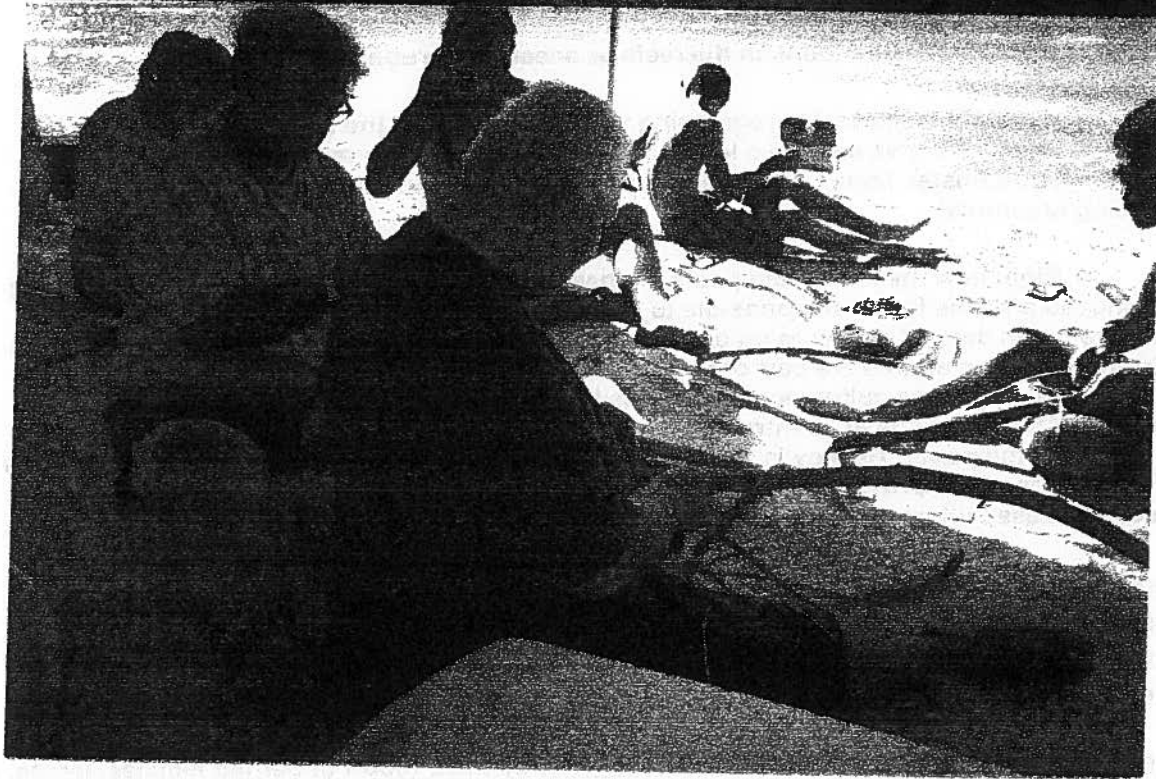
FUKU-BONSAI CULTURAL CENTER & HAWAII STATE BONSAI REPOSITORY

17-856 Olaa Road (PO Box 6000), Kurtistown, Hawaii 96760

Phone (808) 982-9880; FAX (808) 982-9883

Email: sales@fukubonsai.com URL: www.fukubonsai.com or www.micro-lobster.com

98



HONOLULU Advertiser Oct. 17, 1981
Ewa: popular place for gathering
**Limu—choice depends upon
personal preference, heritage**

At the far edge of Ewa Beach where the chain-link fence divides the park from the military area, small groups of people work patiently sorting and resorting seaweed.

They are the limu gatherers. (Limu is the Hawaiian word for seaweed.) Many have looked for limu since they were children and will



HSB 4 Adv 10-17-82

**from
the sea**

mike markrich

spend hours choosing the three or four kinds they want from the approximately 100 species that wash ashore here.

The choice depends on both personal preference and cultural heritage.

An internationally known seaweed expert, Prof. Isabella Abbott, explains: "You may like turnips; I may hate them. All of them are edible, but some you like better than others."

According to Abbott, there are 18 species commonly used in Hawaii. The limu varies so much in taste and texture that it is collected by people with specific uses for it in mind.

"I know a lot of people who eat it Japanese style, pour hot water on it and mix it with miso. But when it comes to seaweed, I'm Hawaiian; I like it just plain with salt," Abbott said.

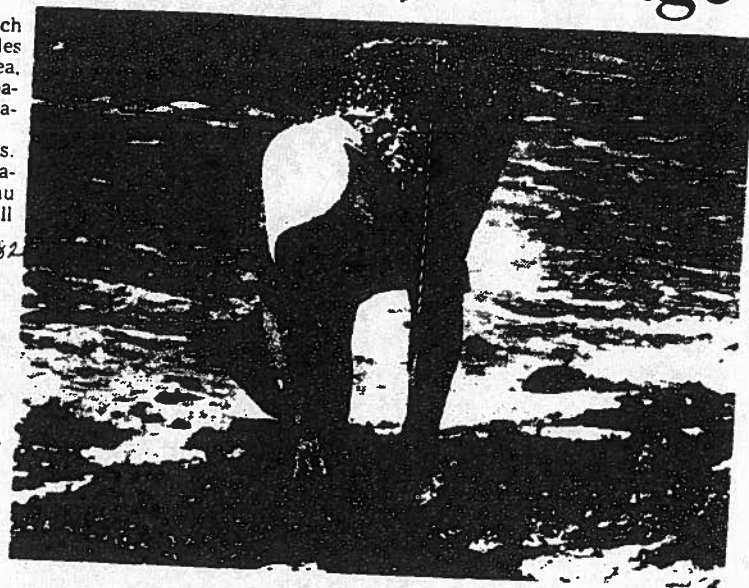
Filipinos tend to look for types of seaweed that are similar to those found in the Philippines. Types of limu that can be eaten fresh with salad and mixed in a fish sauce known as "bagoong" are the most popular. Rosa Sencia of Kalihi comes often to Ewa Beach with her granddaughter to look for limu. Says Sencia, "It's good, maybe tasting like in P.I., thin and long."

Abbott noted that limu is also an important ingredient in a Hawaiian fish sauce known as palu.

Because of the difference in tastes, the limu gatherers often do not compete for the same limu. Filipinos may prize a type of seaweed known to Hawaiians as huna in their fish sauce while Hawaiians would not collect it because they find it bitter.

Japanese people look for the popular ogo that is used for poki and many other dishes, while people of Hawaiian ancestry look for a wide variety of limu that can be used in different Hawaiian dishes.

Evelyn and Frank Giron of Honolulu search for four kinds of limu at Ewa Beach. They look for waiwale (a green spongy limu



known locally as "rats' feet"), red lettuce, ogo and hululuwaena — a red limu they use for fish sauce.

Evelyn Giron says she collects limu for food and for health reasons. "This has iodine; it's good for you. Also it's important for roughage." She says she hopes her children will learn to collect limu, "so they can know how to survive, so in hard times they can go catch fish, get opihi and eat limu."

Ewa Beach is a popular place to gather limu because it has one of the largest varieties of seaweed of any easily accessible beach on Oahu.

The limu grows at a depth of six to 10 feet and the constantly rough waters at Ewa Beach are believed to pull the limu loose. This and the closeness of Pearl Harbor, which has brackish water seaweeds that drift over to Ewa Beach, account for the wide variety of seaweed that is found there.

The techniques of getting limu are as varied as the people who come for it. Some wade in the water to gather armfuls of the brown limu and then look through it carefully with sharp eyes and quick, skillful hands.

Others dive for it and pluck it out by its roots. Botanists discourage this method, because when it is pulled out it doesn't grow back. (The early Hawaiians are said to have always cut the limu with a knife, leaving enough so it would grow again.)

Those who have searched for limu for a long time just walk through the limu and feel for the ones they want with their feet.

There is a commercial market for limu and skilled gatherers such as a man who goes by the name Moresi Jr. He now lives in Kalihi but came there from Samoa and can gather

with his family as much as 70 pounds in six hours.

Says Moresi Jr., "It's a kind of game. We gather them and we sell it for \$1.50 per pound. The stores sell it for \$2.50."

The most highly prized limu, limu kohu, is not commonly found at Ewa Beach. It sells for \$8 per pound wet weight even though 90 percent of it is water.

Although there is some complaint that there are more people gathering limu and that there is more opala (slimy or junk limu) than ever before, the limu gatherers continue to come to Ewa Beach.

Abbott spends a large amount of time at Ewa Beach doing research. She has always found the people are happy and absorbed in their work of gathering limu. They don't find it tedious at all. They are interested in what they find. They are with their family and friends, and it's a lovely day in the sun. Ewa Beach is one of the most popular places on the whole island.

Isabella Abbott's Ogo Kim Chee Recipe

- 2 pounds ogo chopped into 2- to 3-inch pieces
- Handful of coarse Hawaiian salt
- 2 cloves of garlic (chopped) per quart of wilted seaweed
- 1 or 2 chopped round onions or 1 cup chopped green onions
- chopped chili pepper to taste or 1 2 teaspoon cayenne pepper)
- 1/2 teaspoon paprika

Wash and clean the limu. Salt and wilt by letting stand over night. The next day, drain off any liquid, add garlic, onions and paprika. Pack tightly in jars, seal and let stand. It should be ready in two or three days.

Families try to restore depleted limu

live seaweed
replanted after
washing on shore

by Bunky Bakula
Advertiser Leeward Oahu Bureau

EWA BEACH—In his 28 years of skin diving, Kamu Haasenritter has seen the dwindling of bountiful shoreline resources — fish, lobster and limu (seaweed).

The 40-year-old Haasenritter admits to being part of the problem.

"I am one of the guilty ones," he said. "Before, all we knew was how to take. But now I'm willing to work to put it back — to plant."

Queen Liliuokalani Children's Center has helped turn that new outlook into a planting program that began to take shape in May at Ewa Beach's Limu Festival.

"This project is drawing interest like you wouldn't believe," said center official Randy Lee.

"When I was young, I was proud people would come all the way from Kaneohe to pick limu," Haasenritter said. "There were mountains of it."

The edible seaweed is a prized accompaniment for Hawaiian-style raw fish.

When Ewa Beach's large expanse of shallow, murky water became clear — about one week out of every year, "lobsters were friendly. Fish, fat from eating limu, would come around my spear," Haasenritter said.

Possible causes for depletion include overharvesting and overdevelopment.

Haasenritter, an unemployed welder who feeds his family from the sea, is among a group of long-time Ewa Beach families who have taken on a shoreline experiment — replanting limu.

Representatives of 15 area families meet Wednesday nights to discuss the program. On Saturday mornings, they gather at



Bruce Asato / The H

Walter Kamana Sr. demonstrates the art of stringing limu, or seaweed, harvested from the ocean at Ewa Beach Park. After the strand is completed, it is replanted in the ocean in the same area.

Oneula (Hau Bush) Beach Park to plant limu, Lee said. "Everyone is welcome to come learn."

Walter Kamana Sr., a limu expert from Nanakuli who successfully planted 20 varieties of limu over the past 15 years at other Leeward Coast sites, welcomes the open-door policy.

"I get a chance to pass on my knowledge," Kamana said. "And there's a good chance for replanting" in the Ewa Beach area.

Much of Kamana's effort has gone into restocking Koolina limu beds that have suffered from Barbers Point Harbor dredging and Campbell Industrial Park runoff.

Kamana said Ewa Beach participants begin the replanting

process by picking up live limu that washes up on shore. Then, Kamana shows several techniques for planting. In one, he uses rope or three strands of hau-bush bark braided with a variety of limu, including some decoys for hungry fish. The 3-foot-long limu lei are placed underwater and anchored down by rocks.

In a similar technique, potato sacks are filled with "the mama, papa, sistah and brudda limu," said Kamana. The variety of sex and age ensures a stronger growth environment.

And yet another: "It's fun shaking the bag of mother manaua (ogo)," said Haasenritter. "You see millions of seeds come

out and just let them go with the current."

Kamana said that he is ready to harvest in the future. He advises against picking the growing seaweed.

State laws allow him to pick one pound of limu for home use and during the closed season.

"With no kapu, the stocks to grow or I can't stop people from harvesting," Kamana said.

Kamana would like to see the state reinstitute old laws governing seaweed sources and start programs that get involved in limu plant

replanted after washing on shore

By Bunty Balanis
Advertiser-Leeward Oahu Bureau

EWVA BEACH—In his 28 years of skin diving, Kama Haasentitter has seen the dwindling of bountiful shoreline resources — fish, lobster and limu (seaweed).

The 40-year-old Haasentitter admits to being part of the problem.

"I am one of the guilty ones," he said. "Before, all we knew was how to take. But now I'm willing to work to put it back — to plant."

Queen Liliuokalani Children's Center has helped turn that new outlook into a planting program that began to take shape in May at Ewa Beach's Limu Festival.

"This project is drawing interest like you wouldn't believe," said center official Randy Lee.

"When I was young, I was proud people would come all the way from Kaneohe to pick limu," Haasentitter said. "There were mountains of it."

The edible seaweed is a prized accompaniment for Hawaiian-style raw fish.

When Ewa Beach's large expanse of shallow, murky water became clear — about one week out of every year, "lobsters were friendly. Fish, fat from eating limu, would come around my spear," Haasentitter said.

Possible causes for depletion include overharvesting and overdevelopment.

Haasentitter, an unemployed welder who feeds his family from the sea, is among a group of long-time Ewa Beach families who have taken on a shoreline experiment — replanting limu.

Representatives of 15 area families meet Wednesday nights to discuss the program. On Saturday, participants show rather at-



Walter Kamana Sr. demonstrates the art of stringing limu, or seaweed, harvested from the ocean off Oneula Beach Park. After the strand is completed, it is replanted in the ocean in the same area.

Oneula (Hau Busu) Beach Park to plant limu, Lee said. "Every one is welcome to come learn."

Walter Kamana Sr., a limu expert from Nanakuli who successfully planted 20 varieties of limu over the past 15 years at other Leeward Coast sites, welcomes the open-door policy.

"I get a chance to pass on my knowledge," Kamana said. "And there's a good chance for replanting" in the Ewa Beach area.

Much of Kamana's effort has gone into restocking Koolina limu beds that have suffered from Barbours Point Harbor dredging and Campbell Industrial Park runoff.

Kamana said Ewa Beach participants begin the replanting

process by picking up live limu that washes up on shore. Then, Kamana shows several techniques for planting. In one, he uses rope or three strands of hau-bush bark braided with a variety of limu, including some decoys for hungry fish. The 3-foot-long limu lei are placed underwater and anchored down by rocks.

In a similar technique, potato sacks are filled with "the mama, papa, satah and bruda limu," said Kamana. "The variety of sex and age ensures a stronger growth environment."

And yet another, "it's fun shaking the bag of mother manaua (egg)," said Haasentitter. "You see millions of seeds come

out and just let them flow with the current."

Kamana said that limu will be ready to harvest in six months. He advises against picking during the growing season.

State laws allow individuals to pick one pound of limu per day for home use and there is no kapa (closed) season for picking. "With no kapa, or a time for stocks to grow and recover, you can't stop people from overharvesting," Kamana said.

Kamana would like to see the state reinvest in old Hawaiian laws governing shoreline resources and start educational programs that get schools involved in limu planting.



Ewa Beach Limu Project

History and Background

The Ewa Beach Limu Project (EBLPA) began in 1998 through sponsorship by Queen Lili`uokalani Children's Center re-planting select species of limu. The species selected for replanting were prioritized based on food value or cultural significance. Since its inception EBLPA has met the second Saturday each month excluding December and January to hold instructional sessions for the community along with high school and college students.

Mission Statement

The EBLPA is a community centered grass roots effort that has two primary missions. The projects main focus is preservation of coastal habitat through re-planting of select species of limu (seaweed). The EBLPA also has a firm avocation to marine education and preservation of Hawaiian culture and values.

Education

One of the main functions of the project is to educate the community on the importance of limu to coastal habitat by meeting the second Saturday each month having volunteers from all over the island interact with Kupuna and other people having special knowledge in Hawaiian culture or the sea. The project has also partnered with the local high school and community colleges in the area.

- Partnering with local high schools Kupuna assist the marine science teacher at James Campbell High School with the development of inquiry based lessons. The goal is to develop a curriculum that will blend the local culture and values with the textbook.
- Students will be engaged in a semester long study of an assigned section of the coastline along the Ewa Beach Plain. During their coastal investigation students will conduct an

Resource Management

The project focuses on restoration of coastal habitat through replanting of native specie of limu. The role of the kupuna is to oversee re-planting efforts and share historical knowledge about the area so that the re- planting effort has direction based on past history. The re-plating efforts have been successful; however, measurable results have not been realized due to over-harvest and loss of habitat due to urbanization of this region.

To counteract the adverse effect of human impact on coastal habitat the project has worked with the DLNR to establish a Fisheries Management Area (FMA). The FMA was relocated approximately 1 mile east of the re-plant site at Oneula Beach to allow the developer Haseko to apply for permits for drainage from the Ocean Pointe Residential Development. The LMA will take effect sometime between June and October 2006.

The project plans to establish a second LMA at the site of the proposed drainage discharge once the developer has completed their project.

The project is currently seeking funding to support high school and college student internships and out reach initiatives to support the restoration effort in the LMA.

Impact if the Proposed is not Adequately Designed

The discharge for the proposed Papipi Road drainage is located in one of the last active limu beds along the Ewa Coast. This area is home to limu manaua (ogo), wawae`iole, mane`one`o, lipe`epe`e, kala, lipoa, kohu, a`ala`ula a, and other types of limu that have either, food cultural or medicinal value to native Hawaiian and other Polynesian cultures.

If the proposed drainage is not properly designed there is strong potential for irreversible damage to the near shore habitat which would inhibit the future restoration plans of the project rendering all effort and opportunity for the project to be a sustainable entity that has long lasting benefit to the Ewa community.

What are the social impacts for the community?

Destruction of a marine resource like limu is far reaching. From the limu pickers, to residential developers, all are impacted in the Ewa Beach community.

On one end of the continuum are those who are directly impacted by the loss of limu. On the other end of the continuum are those whose only interest is in the ambience marine environment elicits. Although vastly different, each is impacted by marine water quality issues in Ewa Beach.

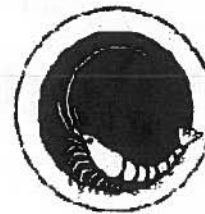
As with many environmental issues, by the time we discover just how much of a stake we have, it's too late.

How can impacts to limu stocks and the marine environment be mitigated?

The key is in recognizing the importance of our marine resources and the responsibility that each stakeholder has in protecting that resource. Baseline monitoring will provide the foundation on which future monitoring data can be compared. Through accurate and reliable monitoring of the water quality we can begin to develop sound mitigation strategies based on qualitative and quantitative data.

THE AMAZING HAWAIIAN MICRO-LOBSTERS!™

SAM GON'S PAGE



Opae-ula has been available in Hawaii for several years and some hobbyists have been growing them for longer than us. We're sharing what we know with everyone and learning from the old-timers.

Sam is the highly respected Director of Science of The Nature Conservancy of Hawaii and for a number of years, he has been breeding opae-ula in his office. He is considered a world authority on trilobites, a class of extinct marine arthropods. He's got an award winning website on the subject! To find it, go to Google and use the search term: "trilobites" and his is the top listing!

On August 11, 2004, he responded to my email and gave me a lead on how to contact John Maciolek. He also included:

For me, reproduction is the given when the `opae`ula are given enough space and hiding crevices, and other conditions are more or less "normal" for them (which is a truly impressive broad range of salinities, light conditions, and temperatures).

Samuel M. 'Ohukani'ohi'a Gon III, Ph.D.

Director of Science, The Nature Conservancy of Hawai'i

That really got my attention and I asked Sam for more information which follows.
~~~David

**August 11, 2004 (same day):** *My most successful tanks have cobbles of either limestone or lava in them running from 1" to 3" in general diameter, and typically quite irregular, allowing for many hiding opportunities. My 15-gallon tank at work gets very bright indirect light all day, but never direct sunlight. Right now I seem to have a eutrophy problem, but I believe this will pass if I remove enough of the excess algae (which has bound up the excess nutrients into tissue). If you read Holthuis' original description, you will see that the actual term for the ecosystem is anchialine pool, not pond. I also have seen reproduction in half gallon and even one quart glass bowls in my office at the Nature Conservancy.*  
~Sam

I replied requesting the significance regarding anchialine pond (or pool) terminology, gave him my understanding of the total habitat, and this is Sam's reply:

**August 16, 2004:** *Holthuis' paper makes it clear that anchialine pools are the external expression of a primarily hypogeal (underground) habitat, so your discussion of the true nature of anchialine pools is right on the money. I liken the pools to light-rich windows on the habitat, at which the opae`ula have optimal food, but they live much of the time in the lightless voids underground.*

*If you look in the dictionary, the difference between pool and pond are not great. Since Holthuis is the originator of the term, and since he used the term "anchialine pool" and not "anchialine pond" in his paper, it is simply proper citation protocol to refer to them by their original description.*

*I concur with the lower salinity argument. When the salinity is too high I see less or curtailed reproduction. OR it could be that high salinity is just fine for adults, but the proper salinity for reproduction is lower. Aloha, ~Sam*

96

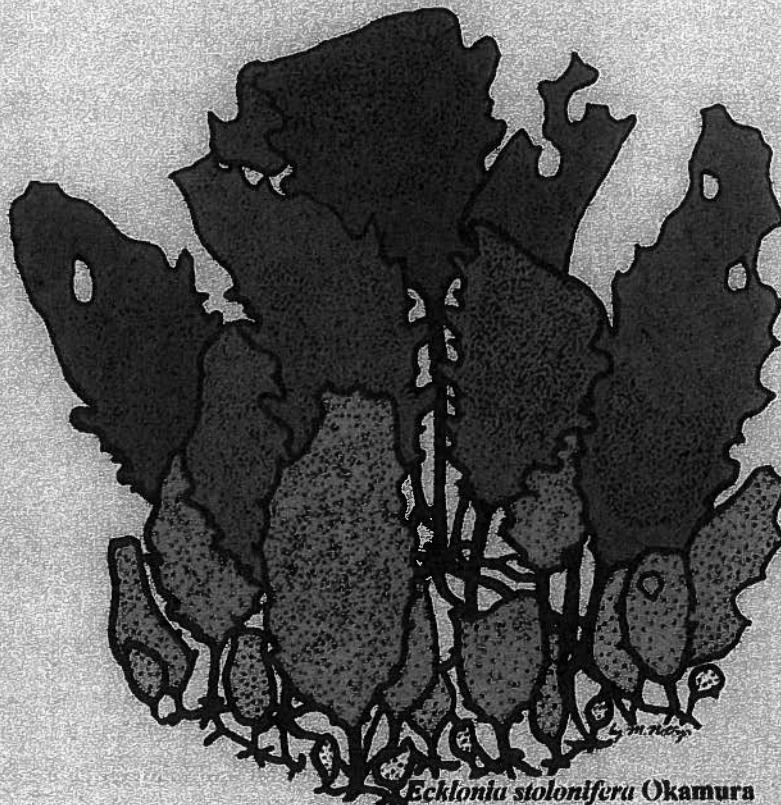


19<sup>th</sup>  
**XIXth International Seaweed Symposium**

**KOBE, JAPAN**  
**March 26-31, 2007**

*SEAWEEDS: Science and Technology for Traditional and Modern Utilization*

**PROGRAM & ABSTRACTS**



*Ecklonia stolonifera* Okamura

Organized by  
The Japan Seaweed Association (JSA)  
The Japanese Society of Phycology (JSP)  
The Japanese Society of Marine Biotechnology (JSMB)



(LIMU MANAUEA)

Algae have recently been remarked as a new source for interesting lectins, because not only many of algal lectins revealed some common biochemical properties inherent in them but also some of them showed interesting biological activities including anti-tumor and anti-HIV activities. Based on the carbohydrate-binding specificity, algal lectins, most of which have no affinity for monosaccharides, are classified into several types, each highly specific for high-mannose type (HM), complex type, both type of N-glycans, or one of tumor antigens such as forssman antigen, sialyl LewisX and core 1-6fucose. The HM N-glycan specific lectins are further sub-grouped into three types (I-III) dependent on their recognition sites of branched oligomannosides. In the continuous study on algal lectins, we recently found that there exists a new family of lectins in lower organisms including marine red algae belonging to the genera, *Solieria*, *Eucheuma* and *Gracilaria*, a freshwater cyanobacterium, and a soil myxobacterium, which shared both the strict specificity for HM N-glycans (type I) and similar amino acid sequences. My talk will deal with the carbohydrate-binding specificity, molecular structures and biological activities of the lectins of the newly discovered family, especially those of ESA-2, an isolectin from *E. serra*, which suppressed the colonic carcinogenesis in experimental mice when given as drink and inhibited the growth *in vitro* of 35 human cancer cell lines.

(MANAUEA)  
OK

### 39 APPLICATION OF POTENT ANTI-VIRAL PROTEINS, CYANOVIRIN-N AND GRIFFITHSIN, ISOLATED FROM NATURAL PRODUCTS TO BIOPHARMACEUTICAL

Mori T

Molecular Targets Development Program, Center for Cancer Research, U.S. National Cancer Institute, NCI-Frederick, Frederick, Maryland 21702, U.S.A.

Present address: Research Head, Biomedical Research Laboratories, Pharmaceutical Research Division, Takeda Pharmaceutical Company Ltd., 2-17-85 Jusohonmachi, Yodogawa-ku, Osaka 532-8686, Japan

E-mail: Mori\_Toshiyuki2@takeda.co.jp

(Hululio)

Cyanovirin-N (CV-N) was discovered from cultures of the cyanobacterium (blue-green alga) *Nostoc ellipsosporum* based on its potent activity against the human immunodeficiency virus (HIV), with  $EC_{50}$  in the nanomolar range. Recent studies have shown that CV-N gel as a topical microbicide can prevent rectal and vaginal transmission of a pathogenic chimeric SIV/HIV-1 virus (SHIV) in macaques without cytotoxic or clinical adverse effects. Mechanistic studies have shown that certain high-mannose oligosaccharides (oligomannose-8 and -9) found on the HIV envelope glycoproteins comprise the specific sites to which CV-N binds. These results also revealed new potential avenues for antiviral therapeutics and prophylaxis targeting specific oligosaccharide-comprised sites on certain enveloped viruses, including HIV and influenza. Griffithsin (GRFT), a novel anti-HIV protein, was isolated from an aqueous extract of the red alga *Griffithsia* sp. GRFT displayed potent antiviral activity against laboratory strains and primary isolates of T- and M-tropic HIV-1 ( $C_{50} = 0.043$  to  $0.63$  nM). GRFT blocked CD4-dependent gp120 binding to receptor-expressing cells and bound to gp120 in a glycosylation-dependent manner. This new type of lectin consists of a single 121-amino acid chain without cysteines. GRFT could be a potential candidate microbicide to prevent the sexual transmission of HIV.

OK

### 40 PURIFICATION AND CHARACTERIZATION OF LECTINS INVOLVED IN WOUND HEALING PROCESS IN A MARINE COENOCYTIC GREEN ALGA, *BRYOPSIS PLUMOSA* (CHLOROPHYTA)

Kim GH

Department of Biology, Kongju National University, Kongju 314-701, South Korea

E-mail: ghkim@kongju.ac.kr

When marine coenocytic green alga *Bryopsis plumosa* is wounded in seawater, the protoplasm extruded from the thalli binds rapidly, forming numerous protoplasts, which later regenerate new cell wall and grow into individual plants. Aggregation of cell organelles in seawater after disruption of the original cell is a crucial step in the process

98

OK  
of protoplast regeneration, as their balanced number ensures protoplast survival. We reported that this process was mediated by a lectin-carbohydrate complementary system. A novel lectin, 'bryohealin', involved in this process was purified and characterized. Bryohealin is a glycoprotein, specific to sugars N-acetyl-D-glucosamine and N-acetyl-D-galactosamine. Its molecular characteristics implied that it was a vacuolar (storage) protein, which was released to seawater after disruption of the cell. As the C-terminal sequence of bryohealin was composed of antibiotic domains, this lectin could perform two important functions necessary for successful protoplast regeneration: 1) aggregation of cell organelles in seawater, and 2) protection from bacterial contamination during protoplast regeneration. Recently, another lectin from *Bryopsis plumosa*, bryohealin-2, also involved in the protoplast regeneration process was purified and characterized. Although bryohealin-2 was specific to the same sugars as bryohealin, its amino acid sequence was different. Cloning and sequencing of full-length cDNA clones corresponding to bryohealin and bryohealin-2 and expression of active recombinants of these lectins in *Escherichia coli* were performed. This study presents first report of an active algal lectin cloning in *E. coli* system, and it contributes largely to our understanding of the wound-healing process and cell formation mechanism in the algae.

#### 41 CONTROL OF BLOOD VESSEL FORMATION BY ALGAL POLYSACCHARIDES

Matsubara K

Department of Nutritional Science, Faculty of Health and Welfare Science, Okayama Prefectural University,  
Soja, Okayama 719-1197, Japan

E-mail: kmatsuba@fhw.oka-pu.ac.jp

Angiogenesis, forming new blood vessels, is involved in many physiological and pathological processes. Induction of new blood vessel formation (neovascularization) is also necessary after vessel injury. Especially, intensive investigation has been conducted on searching for angiogenesis inhibitors, as solid tumor growth depends on angiogenesis. Recent works show that algal anticoagulant polysaccharides affect angiogenesis. Fucoidan, a polymer of L-fucose, which is the most extensively studied algal anticoagulant has been shown to have an antiangiogenic activity. We also found that an anticoagulant galactan from a marine green alga, *Codium cylindricum* inhibits angiogenesis. Interestingly, on the other hand, low molecular weight fucoidan (LMWF) promoted bFGF-induced endothelial cell tube formation and stimulated neovascularization as well *in vivo*. The mechanisms by which LMWF exerts pro-angiogenic effects have been shown that LMWF modulates the expressions of integrins, cell adhesion molecules and plasminogen activator inhibitor-1 (PAI-1) in endothelial cells. Thus, LMWF would be expected to play a role in forming new blood vessels in therapy for ischemia. To clarify the relationship between the molecular size of fucoidan and the effects on angiogenesis, we prepared middle molecular weight fucoidan (MMWF) and examined the effect on angiogenesis and endothelial cell functions. MMWF had weak inhibitory effect in angiogenesis assays, but it could stimulate endothelial cell migration in the presence of VEGF. Thus, MMWF seemed to have both anti- and pro-angiogenic properties. These results suggest that the effects of fucoidans on angiogenesis vary with their molecular size.

#### 42 PHOTOSYNTHETIC RESPONSE OF *GRACILARIA LEMANEIFORMIS* (RHODOPHYTA) TO SOLAR UV RADIATION

Xu JT<sup>1</sup>, Zheng YQ<sup>1</sup> & Gao KS<sup>1,2</sup>

<sup>1</sup>Marine Biology Institute, Shantou University, Shantou, Guangdong, 515063, China

<sup>2</sup>Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan, Hubei, 430072, China

E-mail: ksgao@stu.edu.cn

Photosynthesis of macroalgae during sunny daytime has been previously found to exhibit asymmetrical performance following morning and afternoon solar changes due to depressed rates in afternoon. However, such performance has not been investigated altogether with UV radiation (UVR, 280-400nm). We investigated the impacts of UVR on diurnal photosynthesis of the economic red alga *Gracilaria lemaneiformis* Bory while exposing its thalli to PAR (400-700nm), PAR+UV-A (320-400nm) and PAR+UVR with cutting-off foils. UVR

southwestern Sakhalin coast. During this period a total of 5 aircraft surveys of the shallow coastal zones were done (1965, 1966, 1970, 1974, and 1990). In the coastal zone of the southwestern Sakhalin Island we distinguish two large communities of macrophytes by the dominating species. They are a three-strata community of the *Laminariales* order with the great species diversity (70 species) and a single-stratum community of the *Corallinales* order (4 species). The long-term observations showed that there is a succession (substitution of the *Laminariales* community for the *Corallinales* one) or "isoyake" phenomenon along the southwestern Sakhalin coast in a zone of influence of northern branches of the Tsushima Current. For the first time the succession was observed along the southwestern Sakhalin coast in 1963. The *Corallinales* community continues to extend both in horizontal and vertical directions. In the area of succession the *Laminariales* community has been displaced for the smaller depths and distributed on tops of the rocky ridges at depths between 2 and 0.5 m; the area of distribution has reduced almost as much as 2 times during the recent 50 years.

#### 134 BIOPHARMING THROUGH GENETIC ENGINEERING OF *GRACILARIA CHANGII*

Gan SY<sup>1</sup>, Othman RY<sup>2</sup> & Phang SM<sup>2</sup>

<sup>1</sup>School of Pharmacy and Health Sciences, International Medical University, Plaza Komanwel, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

<sup>2</sup>Institute of Biological Sciences, University of Malaya, 50603 Kuala Lumpur, Malaysia

E-mail: phang@um.edu.my

Genetic engineering has been used as an alternative way to produce improved strains of consistent properties. The advancement of recombinant DNA techniques has brought forth the ability to introduce a desired trait from one organism into another organism. With the development of an efficient genetic transformation system for *Gracilaria changii*, this red seaweed can be used as a bioreactor for the production of valuable biopharmaceutical products. Genes encoding for valuable products such as nutraceuticals and biomedicinals can be introduced and expressed in *Gracilaria* cells. This edible seaweed can be transformed into an edible bioreactor producing biopharmaceuticals such as vaccines. We report the transformation of *G. changii* using particle bombardment and *Agrobacterium*-mediated transformation. The gene encoding for  $\beta$ -galactosidase (*lacZ*) was introduced into the *Gracilaria* cells. Different parameters affecting the efficiency of each transformation technique were studied. These parameters include disk pressure and bombardment distance for particle bombardment; and exposure period, co-cultivation period and the presence of acetosyringone for *Agrobacterium*-mediated transformation. PCR analysis, histochemical staining and enzyme assay were conducted for exposed *G. changii* after four months. Both techniques were found to be effective in transforming *G. changii* and associated parameters were optimised.

#### 135 SOME SPECIES OF SEaweEDS FROM BUNAKEN NATIONAL PARK, MANADO, INDONESIA

Gerung GS, Harahap AP, Bataragosa EN, Rembet UNWJ & Kumampung DTH

Sam Ratulangi University, Fac. of Fisheries and Marine Science, Manado, Indonesia

E-mail: ggrevvo@hotmail.com

Study on seaweeds biodiversity on the basis of taxonomy is poor in Indonesia. Wherever taxonomic study carried out in Indonesia, new species are possible to discover. The development of taxonomy science as well as the availability facilities, have prompted us to conduct more study upon the richness of Indonesia seaweeds. Bunaken National Park (BNP) located in Manado, Northern of Sulawesi island. BNP lies in the Sulu-Sulawesi Seas large Ecoregion located at 1°37' – 1°47'N, 124°4' – 124°48'E. The Sulu-Sulawesi Sea is the junction of Malaysia, Indonesia and the Philippines. Indonesia was declared a Marine National Park in 1981. The park covers 79,056 ha, consisting of five islands (Bunaken, Siladen, Manado Tua, Mantehage, Naen) and one coastal area in Sulawesi mainland (Arakan-Waontulap). This study was focus on the biodiversity of seaweeds and samples collected from 13 stations from all over the BNP areas. Samples were collected in 3 m depth, 10 m depth and in the reef SCUBA in each station. The research succeeded in identified 4 family, 16 genera, 31 species of Chlorophyta; 4 family, 6 genera, 10 species of Phaeophyta; and 8 family, 21 genera, 28 species of Rhodophyta. Hundreds specimens, however,

have not been identified. Some of the species found are important species already exploited for economic purpose in some country. Whilst *Eucheuma* and *Kappaphycus* are the only two genera locally exploited in BNP area.

**136 PHYTOBENTHIC RECOVERY STAGES OVER 20 YEARS OF MONITORING AT THE ABRA OF BILBAO (N. SPAIN)**

Díez I, Santolaria A, Secilla A & Gorostiaga JM

Department of Plant Biology and Ecology, Fac. Science & Technology, University of the Basque Country.

Apdo. 644 Bilbao 48080 Spain

E-mail: gvbdisai@lg.ehu.es

Recovery processes of phytobenthic marine assemblages are poorly documented. This study reports on the main changes occurred in the intertidal macroalgal communities, after the gradual application (1984-2004) of a sewerage plan for the metropolitan area of Bilbao. Fixed sampling sites along a pollution gradient were surveyed seven times in the course of the above period. The improvement in water quality was followed by noticeable changes in species composition and vegetation structure. Species richness and diversity significantly increased in the whole study area, while algal cover only increased in the most degraded sites. Classification (CLUSTER) and ordination (MDS) analyses revealed four recovery stages, together with their discriminant species (SIMPER routine): 1) Extremely degraded stage, dominated by filamentous forms (*Bachelotia antillarum*), 2) Heavily degraded stage, with dominance of non-calcareous caespitose forms: one facies of *Caulacanthus ustulatus*, and another of *Gelidium pusillum*, 3) Moderately to slightly degraded stage, characterised by the calcareous caespitose *Corallina elongata*, and 4) Reference stage, characterized by complex structured assemblages co-dominated by *C. elongata* and *Stypocaulon scoparium*, together with patches of *Bifurcaria bifurcata*, *Cystoseira tamariscifolia* and *Laurencia obtusa*. MDS analysis revealed temporal displacements of all sites towards the reference site. Multivariate analyses focused on functional groups (thallus morphology) showed that morphological complexity of turf-forming species and the diversity of functional groups increased as pollution decreased.

**136a USING SEAWEEEDS AS INTEGRATING BIOMONITORS OF NITRATE AND PHOSPHATE POLLUTION IN COASTAL WATERS**

Campbell C, Dring MJ & Savidge G

Queens University Marine Lab, 12 The Strand, Portaferry, BT22 1LE, UK.

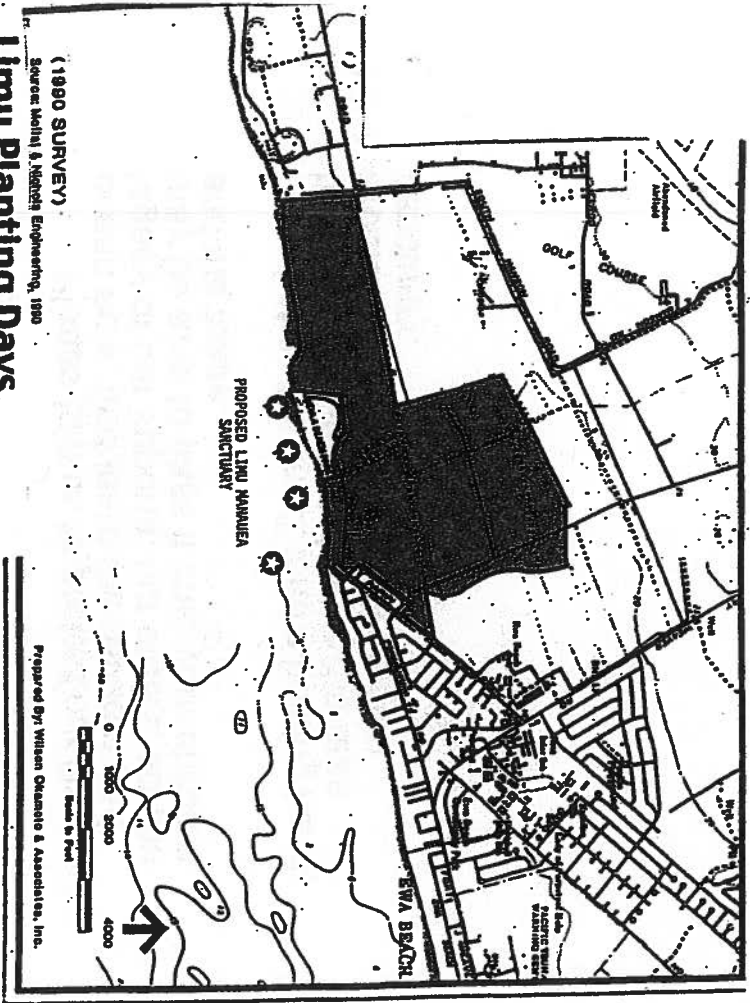
This study investigates the potential for using seaweeds to monitor the extent and development of eutrophication by nitrate and phosphate in the coastal waters of Northern Ireland. *Fucus serratus* and *Ascophyllum nodosum* samples were gathered from seven coastal sites with a range of anthropogenic nutrient inputs. This allowed comparison of sites with different nutrient loads. It was found that plants from sites closest to nutrient inputs had higher internal nitrate content than plants from low input sites. Batch culture experiments were carried out to determine the effect of ambient nutrient concentrations on nutrient concentration in tissues of *F. serratus* and *Ascophyllum nodosum* over time. There was no significant change in internal phosphate content of *F. serratus* under any nutrient treatment, but *A. nodosum* plants showed a significant increase in phosphate during the course of the experiment under all nutrient treatments. Both species showed an increase in internal nitrate. Phosphate concentrations were found to be consistently high in all macroalgal species studied from Strangford Lough and the Irish Sea. This and previous data collected suggest phosphate may not be a useful indicator of nutrient pollution. This study indicates internal nitrate and nitrite concentrations may provide a more sensitive biomonitor of nutrient pollution.

**137 ISOLATION AND CHARACTERIZATION OF BIOLOGICALLY ACTIVE POLYSACCHARIDES FROM ENTEROMORPHA SPECIES**

Grindley TB<sup>1</sup>, Reyes-Suárez E<sup>1</sup>, Zhang L<sup>1</sup>, Bugden S<sup>1,2</sup>, Kai FB<sup>1,2</sup>, Kralovec J<sup>2</sup>, Ewart HS<sup>2</sup> & Barrow CJ<sup>2</sup>

<sup>1</sup>Department of Chemistry, Dalhousie University, Halifax, NS, Canada B3H 4J3

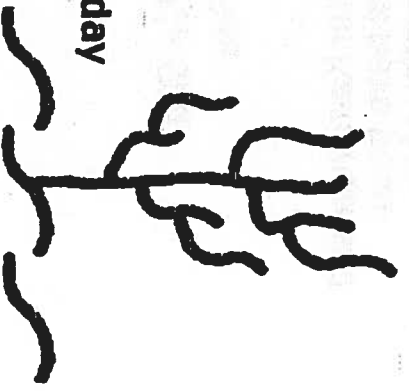
<sup>2</sup>Ocean Nutrition Canada Ltd., 101 Research Drive, Dartmouth, NS, Canada B2Y 4T6



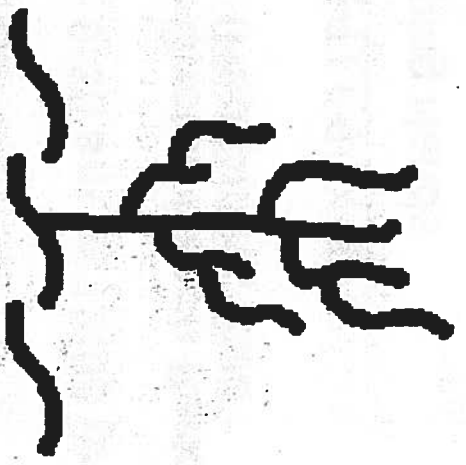
**Limu Planting Days,**  
**All are Welcome!**  
**9:30 a.m. - 12 noon:**

- 2001**
- September 8**
- October 13**
- November 10**
- December 8**
- 2002**
- January 12**
- February 9**

**\*Ongoing every second Saturday**  
**\*Unless cancellation due to**  
**adverse weather conditions.**



*Ke Akua La'au o' ke Kai*  
 God's Medicine from the Sea



*Protect the Limu to*  
*Protect the Sea*  
*A Legacy, A Gift*  
*For All*

**Contact: William Kumia**  
**Phone: Press\* then 82-456-2497**



*Ke Akua La'au o' Ke Kai*  
God's Medicine from the Sea

Kupuna "Uncle" Walter Kamanaa and a group of loyal caretakers have been meeting every second Saturday of the month to replant the limu, seaweed, at Oneula Beach Park in Ewa.

The limu, once abundant, is rapidly disappearing. Soon it will disappear completely.

Without the limu, the fish have no home and protection. The ocean begins to die.

Please join us to protect our limu, our ocean now, and learn the wisdom and legacy of our kupuna, our elders, so you may be able to pass it onto your children and the future.

Let us "lauilima", lend a helping hand, by replanting limu and make the area around Oneula Beach Park a limu sanctuary.

*Kokua*  
Help

- **Every Second Saturday of the month**
- **9:30 am to 12:00 pm**
- **Oneula Beach Park (Hau Bush), Ewa**

*LAULIMA*

Helping Hands

- **Learn about the limu and the ocean ecosystem from the kupunas (elders)**
- **Make limu leis for replanting**
- **Shore walk and talk**
- **Lunch**
- **Contact: William Kumia**
- **Phone: Press \* then 82-456-2497**

Randy III

7/8/98

## Leeward

### Limu restoration planned in Ewa

The Ewa unit of Queen Lili'uokalani Children's Center has launched a *limu* (seaweed) restoration project aimed at regenerating depleted stocks of edible reef plants that once flourished along the Ewa Beach coastline.

Taking the lead from the Ewa Beach Limu Festival in May, which drew thousands of people, the center has decided to address the problem of *limu* depletion, said community-building specialist Randy Lee.

"We're using the festival as a tool," Lee said. "We saw the interest it generated, so now we're canvassing the community door-to-

door to enlist interested residents."

State records show commercial harvest of *limu* in the Ewa Beach area dropped from 5,878 pounds in 1993 to 1,779 pounds in 1997. Depletion has been attributed to both overpicking and ocean pollution.

The center's resident survey should take about three months, Lee said. If there is enough interest, the next step will be to restock Ewa Beach shores with *limu* plantings, he said.

State laws bar picking *limu* by its roots and allow individuals to pick one pound per day for home consumption. Commercially licensed pickers are allowed 10 pounds per day.

People interested can call Lee at 676-5070.

